

**The pains of government technology:
An investigation into the rollout of Healthcare.gov
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Abstract

Governments regularly rely on technology to implement policy. While technology development itself is normally not a part of legislative directives, it is an indispensable part of how laws play out in citizens' lives. The integration of technology and policy, however, does not always go smoothly, a reality often borne out in the public media.

The implementation of the landmark Patient Protection and Affordable Care Act through its website Healthcare.gov is, arguably, one of the most important examples of this connection between federal policy, technology, and media. Unfortunately for the administration and its supporters, the website faced myriad issues from long wait-times to server errors that brought the historic legislation to a standstill. The media covered the event closely, employing a variety of viewpoints and methodologies that helped and hurt the administration's efforts.

This project looks into the media coverage surrounding the website four months before and two months after its initial rollout. While it does not explain the cause of difficulties plaguing the website, it does attempt to explain their portrayal. To this end, the project analyzes media coverage from the left and the right in online newspapers and televised broadcasts to understand what factors affected the tone of the media's coverage.

It finds that media ideology and subject matter shaped the tone of the coverage but in unexpected ways. External factors like Congressional hearings and the 2013 government shutdown may also have had an impact on the tone of the coverage. Clearer definitions and further research are needed here.

Key words: Healthcare.gov, Patient Protection and Affordable Care Act, information technology, public discourse, media analysis

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1 INTRODUCTION:

The Patient Protection and Affordable Care Act (PPACA), passed by the Democrat-controlled Congress and signed by Democratic President Barack Obama on March 23, 2010, mandated the construction of a website to allow Americans to sign up for required healthcare coverage. Officials intended that this website, Healthcare.gov, would be a single point of access for all insurance needs, allowing users to compare plans, input personal information, and register for insurance (Hepler-Smith, 2014).

When the website rolled out on October 1, 2013, however, it faced myriad challenges. From long wait times and stalled pages to blatant errors on submitted information, millions of Americans could not access the website and consequently healthcare insurance that the Obama administration had promised them for three years (Pear, LaFraniere, & Austen, 2013). In the media and political frenzy that followed, a variety of issues came forth as both sides questioned the administration's handling of the website. The President's landmark legislative achievement had been brought to a standstill by a website, one which the President had promised would function as easily as "shopping online" (Hennessey, 2013).

Along with the government shutdown of October 2013—also related to the website—Healthcare.gov consumed the public's political bandwidth. In two months' time, however, the White House fixed the website and enrollment eventually reached initial projections (Somashekhar & Sun, 2013). What was the public conversation before and after the website's rollout? How can we understand this conversation, who challenged whom and, eventually, how that conversation changed? How can we best understand the nature surrounding these challenges?

This research focuses on the public discourse around Healthcare.gov, specifically four months before and two months after the website's rollout. It attempts to answer the following question:

What factors best explain the tone of the media coverage surrounding the rollout of the Healthcare.gov website in the fall of 2013?

This investigation uses media coverage as a representation of the public discourse. Accordingly, it analyzes articles and transcripts to document the tone of the discussion; to better understand what major issues occurred, what factors led to certain representations of the website, and how government use of technology plays out in the public arena.

Healthcare.gov is a valuable case for two reasons. First, the website is large in scope. Policy makers intended for the website to have millions of users across 36 U.S. states (Somashekhar & Sun, 2013). Few government websites have the breadth and depth of users that public officials intended Healthcare.gov to have.

Second, the website is of great importance to the policy that created it. Healthcare.gov has been described as the “lynchpin” of the PPACA as it provides information on coverage, allows individuals to signup online, and verifies user information (Wolf, 2013). Moreover, it is the main point of contact for users, making it the public image of the landmark legislation.

2 MEDIA AND PUBLIC DISCOURSE IN THE PUBLIC SPHERE

2.1 The Public Sphere

At the core of this investigation lies the concept of public discourse in a public sphere. Jürgen Habermas, a 20th century German scholar, wrote extensively about the existence of a public sphere and its evolution from the bourgeois public sphere to the modern concept of public opinion. He provides a useful foundation for understanding public discourse by defining public sphere as that in which “private people come together as a public” (1991, p. 27). He differentiates this from the state and the economy, a distinction which Nancy Fraser explains well in her essay *Rethinking the Public Sphere*:

“[The public sphere] is conceptually distinct from the state; it is a site for the production and circulation of discourses that can in principle be critical of the state. The public sphere in Habermas' sense is also conceptually distinct from the official-economy; it is not an arena of market relations but rather one of discursive relations, a theater for debating and deliberating rather than for buying and selling” (1990, p. 57).

Discourse within the public sphere provides a good avenue for understanding policy because it represents a discussion amongst individuals affected by the policy. It is a real-world application of the policy itself in the public sphere, a product of the people responding to actions by the government. In fact, Habermas argues that the public sphere developed as a result of and method for checking government domination (Habermas, 1991).

2.2 The role of mass media

One way of understanding public discourse is through the proxy of media coverage. Although Habermas himself argues that mass media has turned into a sphere of “culture consumption” rather than discourse (1991, p. 162), other scholars argue that news media, as a sub-category of mass media, is not only an important part of the public sphere but also a prerequisite for the public sphere to even function (Schulz, 1997). News media provide more discourse than the face-to-face conversation Habermas idealized because the former sends a variety of challenging messages while the latter has a tendency to fall into homogeneity (Mutz, 2001). Empirical evidence points to the importance of news media in the democratic process: during election campaigns, news media reach most voters while only a few attend political meetings which provide for the personal interactions Habermas desires. Even where there is critical engagement within the public sphere, individuals depend upon the news media for information to substantiate their claims. Moreover, moments of intense public engagement like political conventions and demonstrations can be enhanced by news media coverage (Schulz, 1997).

If media are to serve as a proxy for the public discourse, which in turn will provide a deeper understanding of the issue, ensuring that the issue has enough media coverage becomes essential to analyzing it. Here, the rollout of Healthcare.gov has few problems. The website was inseparably tied to the legislation that created it, arguably the most contentious law of the Obama presidency (Thompson, 2013). The rollout of the website was also directly related to the government shutdown of October 2013, another politically combative issue. As a result, the rollout brought out significant discourse from both sides of the ideological aisle and from all actors (media, public, elites); thus providing enough material for analysis.

This abundance of material, however, requires a systematic method of analysis. Here, there are two solutions: the first is subject matter, which analyzes *what* is being said. This relates to a common practice in media scholarship known as agenda setting where media organizations influence public opinion by choosing to highlight certain stories over others. This attention consequently increases the awareness and concern for such issues in the public's mind (Sheafer, 2007).

The second tool to analyze content is tone, which captures *how* things are being said and perceived. Media scholarship refers to these practices as framing, which assumes that the public can be influenced by the way issues are characterized in media reports. The media choose frames that resonate with "existing underlying schemas among their audience" (Scheufele & Tewksbury, 2007, p. 12). Framing is not to be confused with second level agenda setting which states that "the attributes of the object emphasized by the news media affect the saliency of those attributes in the public's mind" (Sheafer, 2007, p. 22). Framing is concerned with the presentation of messages rather than the attributes of the subject of the message.

One important part of tone is media ideology. This is defined as "the preference or demeaning (whether intentional or unintentional) of one ideology over others" and it can appear as "the 'angle' of or tone for reporting different stories (positive, negative, etc.)" (Eisinger, Veenstra, & Koehn, 2007, p. 23). Although the existence of bias within media coverage is hotly contested by media scholars, this investigation assumes that such bias exists on the left and the right as there is evidence that points to both (Brady & Ma, 2003; Groseclose & Milyo, 2005; Nunberg, 2007). Because the existence of media ideology can affect the tone of the coverage, I have included it as an important piece of my investigation.

Many scholars have studied the media effects discussed here. I will expand upon them further in my methodology where I outline their relevance to analyzing the rollout of Healthcare.gov.

2.3 A Model for Government Technology Use

Because of the technical nature of the website, it is useful to adopt a commonly used model in electronic government (e-government) literature to help explain how government

websites work. The aim of the model is to organize and analyze the media coverage by providing specific categories to document what is occurring with the website rollout.

Before diving into a specific model, I have adopted the following definition of e-government from David McClure to explain the field at hand:

“Electronic government refers to government’s use of technology, particularly web-based Internet applications to enhance the access to and delivery of government information and service to citizens, business partners, employees, other agencies, and government entities. It has the potential to help build better relationships between government and the public by making interaction with citizens smoother, easier, and more efficient. Indeed, government agencies report using electronic commerce to improve core business operations and deliver information and services faster, cheaper, and to wider groups of customers.” (Layne & Lee, 2001, p. 123)

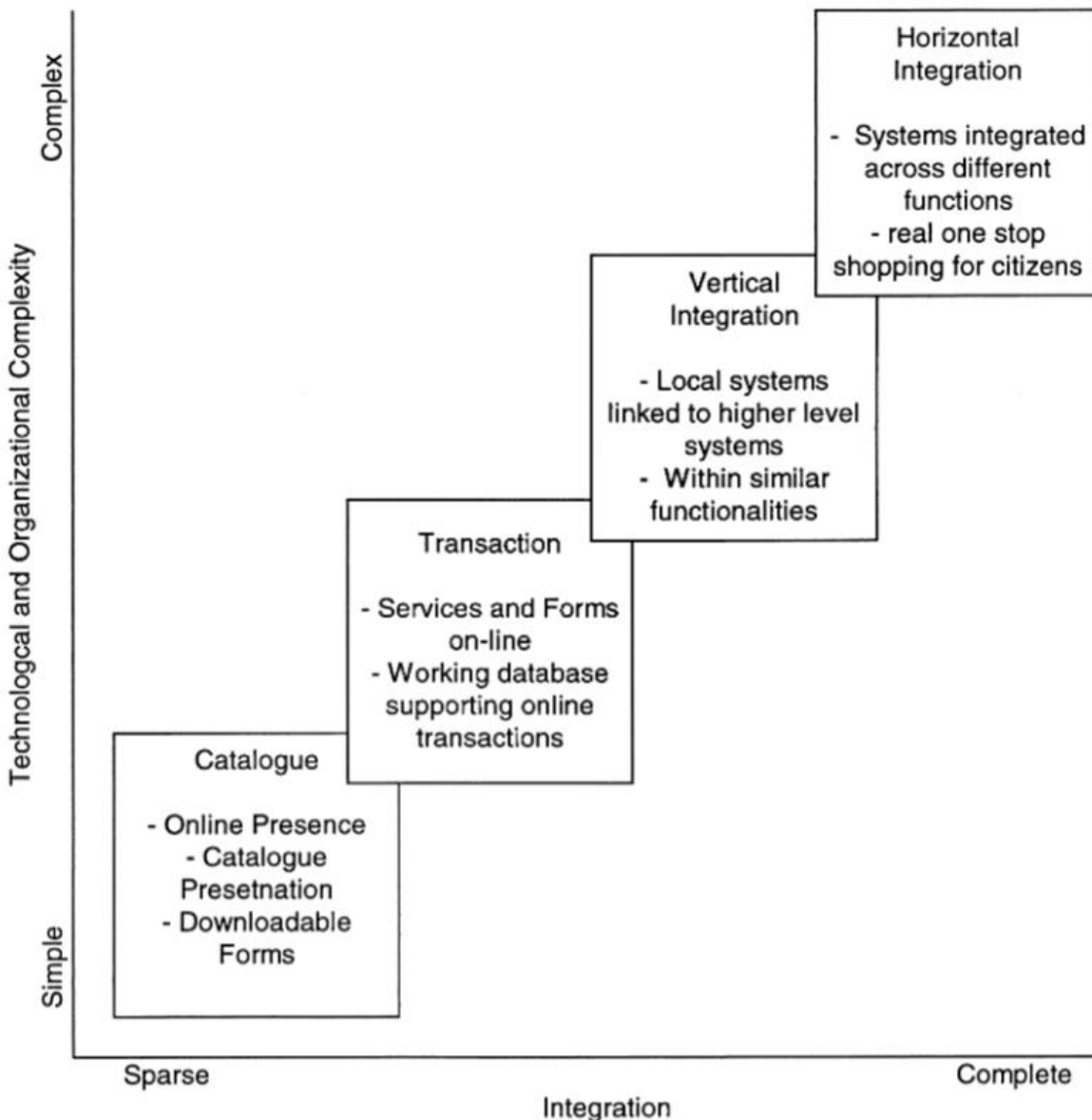
Although e-government is a term which can be difficult to define (Yildiz, 2007), Healthcare.gov fits this definition of e-government well in terms of intended goals: Healthcare.gov is a “web-based Internet application” that delivers government information to “citizens, business partners [insurance companies]...other agencies [various federal agencies], and government entities [state governments].” The website aims at building “better relationships between government and the public” by being user-friendly and intuitive (Hepler-Smith, 2014), and it uses “electronic commerce to improve core business operations and deliver information and services” more efficiently through a federally integrated database.

The Layne & Lee model, developed by researchers Karen Layne and Jungwoo Lee, attempts to explain how e-government functions. It argues that there are four stages of growth for an e-government initiative: “cataloguing, transaction, vertical integration, and horizontal integration” (2001, p. 133). The model progresses from one stage to the next in a “progressive” and “stepwise” manner. Progressive means that each successive stage in the model is more desirable than the preceding stage while stepwise means that the government must achieve each step before moving onto the next (Coursey & Norris, 2008, p. 524). A model like this is also

described as linear. For Healthcare.gov and e-government initiatives in general, this linear nature reflects the difficulty of achieving later, more complex stages of development.

The model also progresses in two directions: “Integration” and “Technological and Organizational Complexity.” The former ranges from “Sparse” to “Complete” while the latter ranges from “Simple” to “Complex” (2001). See **Figure 1** below for a visual representation.

Figure 1: Layne & Lee Model (2001, 124)



2.3.1 Stage 1: Cataloguing

In the cataloguing stage, governments focus on establishing an online presence. This often entails posting information about basic government services and functions. As the website becomes more complex, the government begins to organize information more intuitively through indexing. By making information dissemination the first stage, Layne and Lee establish the government's role as an information provider. Part of this is out of necessity. In the earlier stages of the model, e-government is not highly dynamic or powerful. Rather, it is slower to adopt new technologies which makes the simple posting of information much easier than complex integration or transaction. The other part of this role is out of responsibility. One of government's core functions is communicating information to the public. This process can be simplified through technology—even if the technology itself is very simple (Layne & Lee, 2001).

In terms of Healthcare.gov, this initial information dissemination stage points to the website's most basic function, providing information about the PPACA. Because of the law's complexity (and the considerable confusion surrounding it close to the rollout of the website (Somashekhar & Craighill, 2013), the United States Health and Human Services Department used the website to explain the legislation and its requirements. In fact, explaining rules and regulations behind the PPACA was originally the only point of Healthcare.gov in 2010. It was not until its rollout that the website gained additional dimensions, namely providing information about available insurance plans and allowing users to sign up for insurance coverage. In terms of organizing the discourse, the cataloguing stage will focus on the content, availability, and presentation of information before the login process begins.

2.3.2 Stage 2 Transaction

In the Transaction stage, citizens begin interacting with the government such that technology begins to add its own value rather than solely duplicating processes. Government officials and citizens find new, more efficient ways to interact with each other over the internet. Examples include filing taxes or applying for a permit online without the need to travel to a government office. There is also a democratic participatory element tied to the transaction stage: "Citizens move from a passive to active role by not only conducting transactions on-line, but also

participating through on-line forums that allow citizens to talk directly to government officials or take an active role in public hearings” (Layne & Lee, 2001, p. 128)

In the context of Healthcare.gov, the transaction stage will help organize the public discourse concerning individuals’ ability to successfully login, provide information, see pertinent insurance options, and submit claims.

2.3.3 Stage 3: Vertical Integration

At this stage, the focus shifts from automation of existing services to the improvement of those services. This transformation necessitates a change in government procedures and organization. Whereas most government services are localized and fragmented at the transaction stage, in the vertical integration stage, agencies begin to integrate services of similar functions across different levels of government (i.e. local, state, and national) such that information submitted at one level is available at other levels. For example, a citizen should be able to apply for a business license at the local level and then be able to access that same information at the state level when applying for another business license (Layne & Lee, 2001).

Vertical integration is essential to Healthcare.gov because the website connects users distinguished and organized by their state to a federal website. It then verifies their information against state and federal databases after the login process. It is important to remember that not all Americans accessed Healthcare.gov directly. Those who lived in states that created their own exchanges accessed their respective state exchanges rather than the national exchange. Nonetheless, these state exchanges still accessed the backend verification tool of Healthcare.gov, a nod to the inherent vertical integration involved in the system.

2.3.4 Stage 4: Horizontal Integration

This stage is the final one in the Layne & Lee model. It builds upon the transformation of government services by advocating for integration across various government services. Layne and Lee explain, “Horizontal integration refers to system integration across different functions in that a transaction in one agency can lead to automatic checks against data in other functional agencies” (Layne & Lee, 2001, p. 133). This stage aims to build a website that serves as a “one-stop shop” for citizens looking to interact with the government.

With Healthcare.gov, horizontal integration plays a key role. Like vertical integration, this stage is responsible for verifying information that users submit. Rather than checking it with state databases, however, it checks it with databases that belong to other federal agencies like the Internal Revenue Service. Horizontal integration is also a factor in the enrollment and payment process. Once users have picked a plan, the website must transmit information about the user to insurance databases which then process enrollments.

2.4 Summary

Such modeling is valuable because it provides an understanding of the subject matter of the public discourse. Although the rollout of Healthcare.gov had strong political undercurrents, at its core lay a complicated technology system that determined the success of the system itself. As such, an e-government model like the Layne & Lee model, which discusses these technical aspects, will help categorize and subsequently analyze the public discourse present. In the methodology, I operationalize the subject matter as criteria values.

The Layne & Lee model, the usage of media as a proxy for public discourse, and the roles of tone and subject matter pose important considerations for the original research question. Given the background literature, there are two possible answers or hypotheses:

- 1. Media ideology will influence the tone of the public discourse. The left will be more positive and neutral when discussing the rollout while the right will be more critical.*
- 2. Subject matter will influence the tone of the public discourse. Certain subjects will be more critical while others will be more positive and more neutral.*

The proposed methodology will shed light on these two hypotheses by systematically analyzing hundreds of items published by the news media to document tone and subject matter amongst other important characteristics.

3 METHODOLOGY

This investigation focused on media coverage occurring four months before and two months after the Healthcare.gov rollout (July 1, 2013, to December 1, 2013). This period encapsulated many important events like final changes made to the website, the website's contentious rollout, and efforts by the Obama administration to fix the website. It is important to note that the time period refers to the *time* of the public discourse not the *content* of the public discourse. Media pieces published outside of this time period that discuss events within the time period are not coded. I will explain how I narrowed the media sources in the Data section.

I analyzed articles and broadcast transcripts that discussed the website's rollout. When I came across a statement or group of statements that discussed a specific topic, I copied the text into an Excel sheet and numbered it as an entry. I then filled in other information about that statement like source, date, media source ideology, criteria value, and tone (See **Appendix 1** for an example). The first two categories are straightforward, so I will focus on explaining the last three.

3.1 Media Ideology

This refers to the political lean of the source, which can be either Left or Right. I explain the specifics of this in regards to my investigation in the Data section of the paper.

3.2 Criteria value

Criteria values serve as representations of the subject matter of each statement. Initially, per the literature review, I planned to use the four stages of the Layne and Lee model as my only criteria values (i.e. Catalogue, Transaction, Vertical Integration, and Horizontal Integration). I realized, however, that many statements by the news media referred to issues outside of the model's criteria values. As a result, I created new values to add *on top* of the existing four. I performed this process ad hoc: statements that fell outside of the Layne & Lee model were classified as "Other." When patterns began to emerge, I created new criteria values accordingly. Below is a table of the old and new criteria values (See **Table 1**) as well as an explanation of the new criteria values.

Table 1: Complete list of criteria values

Affordable Care Act
Cataloguing
Horizontal Integration
Politics
Preparation
Repair Process
Security
State Exchanges
Transaction
Vertical Integration
Website Performance

3.2.1 Affordable Care Act

A common subject commenters referenced when discussing Healthcare.gov was the Affordable Care Act (coded “ACA”). This included both direct and indirect references to the ACA or its common nickname “Obamacare.” Topics included the law’s general rollout, enforcement rules and delays, resulting confusion between Medicaid and Medicare, loss of coverage due to cancelled policies, public support for the law, and most commonly opinions about the law.

3.2.2 Politics

This criteria value was the broadest of the categories. It included issues regarding Congressional hearings on the website, the 2013 government shutdown, demands to fire or protect key executive figures, perceived public messages, impacts on the election, and broad philosophical arguments about the size and role of government.

3.2.3 Preparation

Preparation covered all statements that discussed the development and creation of Healthcare.gov. This included technological design decisions, management choices, procurement procedures, concerns raised before the rollout, and total costs for the initial design phase.

3.2.4 Repair Process

This criteria value included all statements that discussed the repair process undertaken after the Obama administration discovered issues with the website. This covered issues regarding improvements, obstacles, changes in management, alternatives, and overall progress.

3.2.5 Security

A significant issue that surfaced in the media and in congressional hearings was the security of personal data entered into the website. This criteria value included statements that discussed security flaws and improvements and political warnings regarding security.

3.2.6 State Exchanges

The ACA allowed states to establish their own exchanges (with or without the assistance of the federal government) or utilize the federal exchange. 14 states chose to build their own exchange, three have federally supported exchanges, and seven have state-partnership marketplaces. The other 27 chose to allow the federal government to facilitate its exchange ("State Health Insurance Marketplace Types, 2015," 2014). Although state exchanges operated independently of the federal exchange, they still required certain features built into the federal exchange system like the Enterprise Identity Management tool (EIDM). Therefore, some statements regarding state exchanges were excluded while others that discussed some connection to the federal system were not. Although state exchange statements could fall under vertical integration or horizontal integration, it was kept separate because a successful state enrollment involved both steps.

3.2.7 Website Performance

This criteria value covered two things: application or enrollment figures and general performance of the website. By definition, the first category could not be defined by any single stage of the Layne & Lee model as each stage is necessary for a successful application or enrollment. The second category is less defined than the first. It included statements that commented on the general functioning of the website (e.g. “It is working,” “It is slow,” “I gave up because the website did not work”).

3.3 Tone:

3.3.1 Positive

- Definition: The commenter issues praise regarding the subject. The praise may include facts but there is a positive spin to those facts.
- Example: “That issue aside, the site seems to be working, and I found it to be well-designed and helpful.” (Downs, 2013)

3.3.2 Neutral:

- Definition: It is an objective, verifiable statement that provides facts. No viewpoint is made about the issue.
- Example: “It is more stable, with many more people able to use it simultaneously than just two weeks ago. But it still suffers sporadic crashes, and large parts of the vital “back end” that processes enrollment data and transactions with insurers remain unbuilt.” (Stolberg & Shear, 2013)

3.3.3 Critical:

- Definition: The commenter offers criticism that goes beyond the statement of objective facts. He or she adds a level of subjectivity.

- Example: “‘The rollout of this thing made a trip to the DMV look like a good time,’ Senate Minority Leader Mitch McConnell, Kentucky Republican, said Wednesday.” (Howell, 2013)

4 DATA

Various news sources produced a considerable amount of information on Healthcare.gov. This information varied from firsthand accounts by developers who worked on the website to opinion editorials heavily criticizing the website and the President.

Because of the amplitude of sources, I developed representative samples of the media coverage. There are two categories of media sources: online newspaper and news broadcast. For each category, I chose one media source that was left-leaning and another that was right-leaning. **Table 2** below shows the sources organized by level of government and political inclination. Beside each source is a citation to a journal article that characterizes the source as left-leaning or right-leaning.

Table 2: Media sources by ideology and type

	Left-leaning	Right-leaning
Online Newspaper	New York Times (Groseclose & Milyo, 2005)	Washington Times (Groseclose & Milyo, 2005)
News Broadcast	MSNBC (Staff, 2008)	Fox News (Iyengar & Hahn, 2009)

Because these sources publish thousands of articles monthly, I searched various databases with the term “Healthcare.gov” and the chosen time period (July 1, 2013 to December 1, 2013). This key word search yielded a certain number of articles for each source type. I used random analysis to identify which articles to analyze.

For the New York Times, the sample size was 177 articles. I assigned each article a number from 1 to 1000. If the article had an even number, I chose it for analysis. This yielded 81 articles. I did the same for articles from the Washington Times which had a sample size of 85 articles. Because that method only resulted in 18 articles, I also marked articles that had a

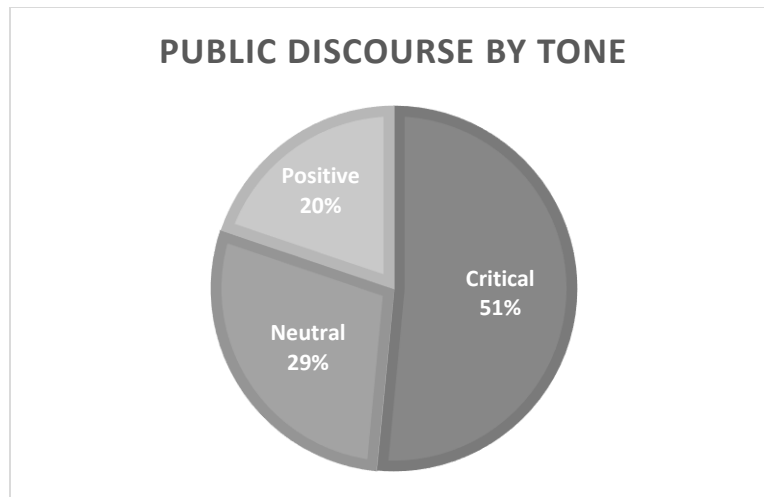
number less than or equal to 500 (effectively 50 percent). This yielded 25 distinctly new articles which led to 53 articles total. For Fox News transcripts, the sample size was 286. I assigned each transcript a number for 1 to 1000 and marked transcripts with a number less than or equal to 200 for analysis. This yielded 56 transcripts. The sample size of MSNBC transcripts was 94. I applied the same method of selection as I used with Fox News except I chose transcripts equal or less than 500 (50 percent). This yielded 47 transcripts. I chose these percentages arbitrarily to create similar numbers of articles and transcripts across each media source.

5 EMPIRICAL SECTION

In this section, I primarily utilized percentage values rather than absolute figures because the absolute number of statements in any criteria value or any tone is not significant by itself, especially when comparing across criteria values. For example, the criteria value State Exchanges had only 24 positive statements while the ACA criteria value had 119. Alone, this would show that the public discourse about ACA was considerably more positive than that of State Exchanges. However, State Exchanges only had 54 total statements whereas ACA had 440. This gave State Exchanges a 44 percent positive score, making it the “most positive” criteria value. ACA was third most positive at 30 percent.

A majority of the public discourse regarding Healthcare.gov was critical, while 29 percent was neutral, and 20 percent was positive (seen in **Figure 2**). What follows is a further breakdown of each tone category, beginning with neutral.

Figure 2:



5.1 Critical

Critical statements constituted a majority of the overall statements issued regarding the website. The five criteria values that had the highest percentage of critical statements amongst all statements in that criteria value were Politics, Preparation, Website Performance, and ACA.

Table 3 below shows the percentage breakdown for each tone, ordered from highest to lowest in the critical category.

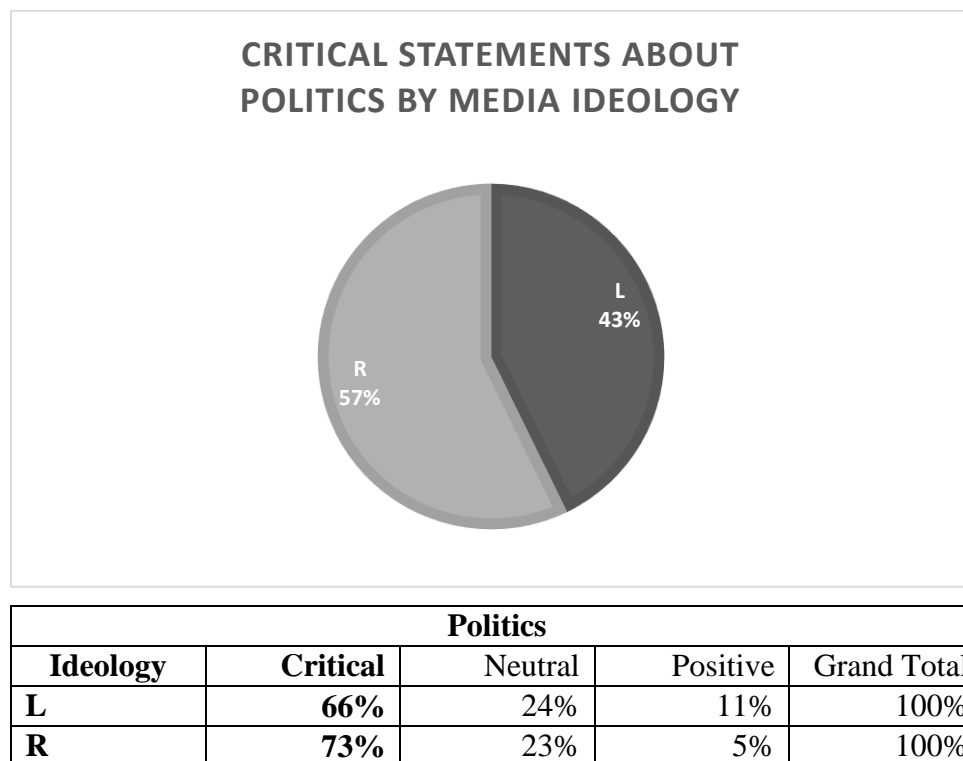
Table 3: Most critical criteria values

Rank	Criteria Value	Critical	Positive	Neutral	Grand Total
1	Politics	70%	7%	23%	100%
2	Preparation	62%	6%	32%	100%
3	Website performance	56%	18%	26%	100%
4	Security	53%	15%	32%	100%
5	ACA	47%	30%	23%	100%
6	Repair Process	39%	36%	25%	100%
7	Horizontal Integration	35%	5%	60%	100%
8	Transaction	33%	18%	49%	100%
9	Catalogue	33%	20%	48%	100%
10	Vertical Integration	32%	14%	54%	100%
11	State exchanges	20%	44%	35%	100%

5.1.1 Politics

One might assume the Politics category would be most vitriolic by nature. The data bears out such an assumption. The right contributed more critical statements about Politics than did the left but not by a significant amount. When discussing Politics, the left was critical 66% of the time while the right was critical 73 percent of the time (See **Figure 3**).

Figure 3:



- Congressional hearings on Healthcare.gov: While both sides discussed the hearings, right-leaning media sources criticized individuals providing testimony for poor answers while Democrats labeled such hearings as politically charged and useless. Democratic anger was clear in the “Let Todd Work” campaign, an effort by the administration’s supporters to block a Republican subpoena requiring Chief Technology Officer Todd Park to testify.

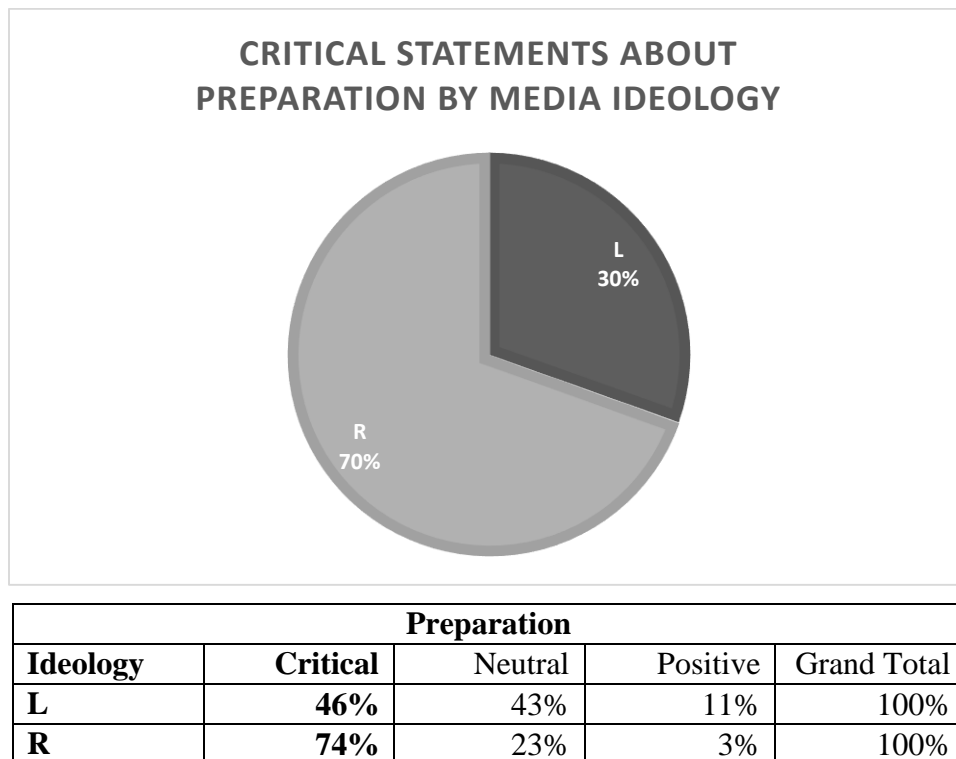
- Government shutdown: Democrats primarily referred to the government shutdown, attacking Republicans for shutting the government down over the ACA. They countered claims about website costs by arguing that the shutdown itself caused billions in damage.
- Demands to fire/protect key executive figures: Republicans consistently and nearly unanimously called for the firing of Kathleen Sebelius, the Secretary of Health and Human Services, the government agency responsible for the rollout of the ACA. Accordingly, they criticized President Obama for not holding her accountable in due time. Democrats responded by arguing that firing key leaders would not hasten the repair process.
- Perceived public message: Republicans publicly expressed their indignation at website failures, shortcomings in the ACA, and their initial insistence on delaying ACA implementation. Democrats countered by expressing anger at Republicans for being unhelpful and at the Obama administration for botching the rollout in the first place.
- Impacts on the election: Republicans argued that the failure of the ACA would hurt Democrats come 2014 Mid-term elections. Democrats countered by pointing towards an improving website and reinforcing the notion that the government shutdown was a Republican idea.
- Broad philosophical arguments: Republicans made two philosophical arguments regarding Healthcare.gov. One argument was that it was emblematic of the government failing to do anything correctly. The second argument was that the website and the ACA were examples of expanded government power.

As evidenced above, many “politics” statements were either critical. However, there were some statements that were positive. These statements either referenced the need to work together to fix the issue or the realization that certain criticisms had gone too far.

5.1.2 Preparation

Whereas left- and right-leaning sources contributed comparable amounts of critical statements regarding Politics, the right was considerably more critical of the preparation process than was the left. The left had equal percentages of critical (46 percent) and neutral (43 percent) statements when discussing the preparation process. The right was considerably more critical (74 percent) than it was neutral (23 percent) (See **Figure 4**).

Figure 4:



- Technological design decisions: An important technological decision for Republicans was the browsing feature. The Centers for Medicare and Medicaid Services (CMS) decided in September to require people to register for an account before they could browse for insurance products. This created a bottleneck in the account registration (i.e. transaction) process. Republicans accused the administration of doing this to prevent people from seeing the price hikes with the ACA, contributing to the critical statements. To fix this problem, the administration created a simple, temporary browsing feature that did not require registration.

Republicans also criticized this change because it gave people under 50 years of age a quote for a 27 year old while it gave those from 50 to 64 years of age a quote for a 50 year old. Republicans again criticized the administration for being dishonest.

- Management choices: A key decision made by the administration was choosing CMS as the lead contractor for the project. CMS administers Medicare and works in tandem with states to administer Medicaid. The head of the agency at the time was Marilyn Tavenner who faced a difficult round of questions by Congress like Kathleen Sebelius. CMS has taken on the creation of technology projects before. However, Democrats and Republicans alike criticized the administration for putting a government agency rather than an experienced contractor at the head of arguably the most complex technological project in the country's history.

- Procurement Procedures: Democratic supporters inside and outside the administration claimed that a key cause of the botched rollout was complicated procurement procedures. They contended that the procedures only allowed large, bureaucratic companies to bid for projects. This resulted in low quality, expensive work like the initial website.

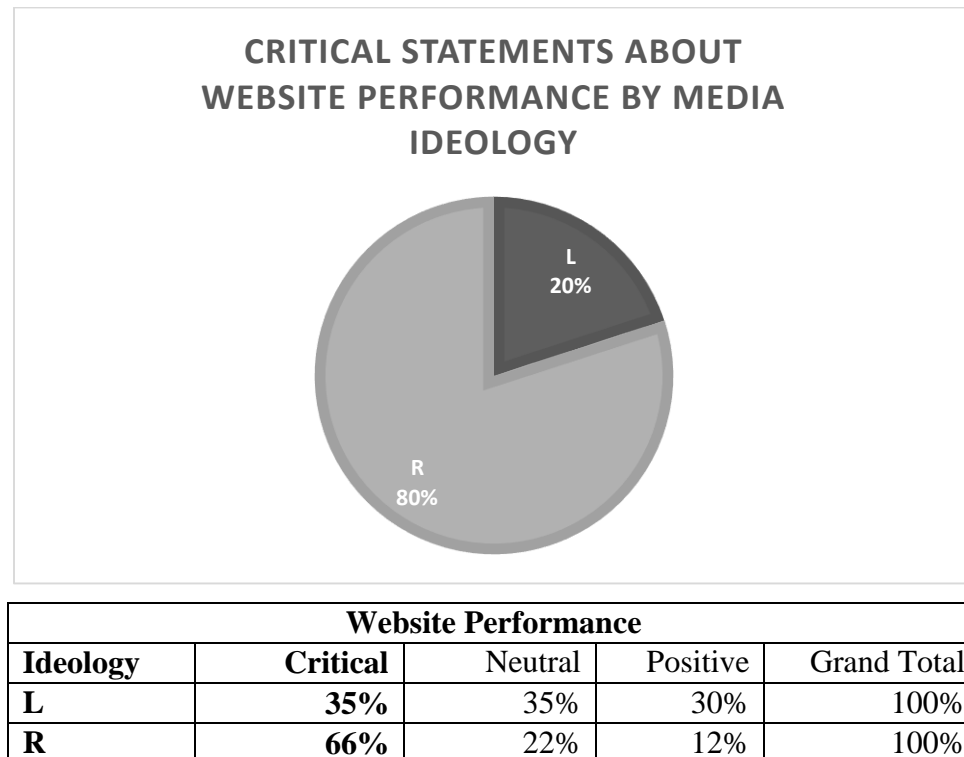
- Concerns raised before the rollout: Congressional hearings held before the rollout revealed important issues the administration needed to address. However, the hearings pointed toward a generally smooth rollout as contractors stated that they felt confident about success. This contrasted with certain news reports after the rollout that uncovered issues unaddressed by the administration before the rollout occurred. Republicans and Democrats alike (though Republicans more) criticized the administration for not being forthright with its explanations.

- Total Costs: Republicans charged that the administration had wasted taxpayer money developing a poorly functioning website. Cost estimates ranged from the multiple millions by Democrats to the hundred millions by Republicans. This issue resurfaces in the repair process criteria value.

5.1.3 Website Performance

When discussing website performance, right-leaning sources contributed considerably more critical statements than did left-leaning sources. The right also spent more time being critical (See **Figure 5**).

Figure 5:



- Overall performance of the website: Website Performance described how the website was functioning overall. It referred to problems that did not relate to any specific category in the Layne & Lee model. Interestingly, Layne & Lee criteria values were overwhelmingly neutral while Website Performance was mostly critical. I will discuss this in more detail in the Conclusion section.

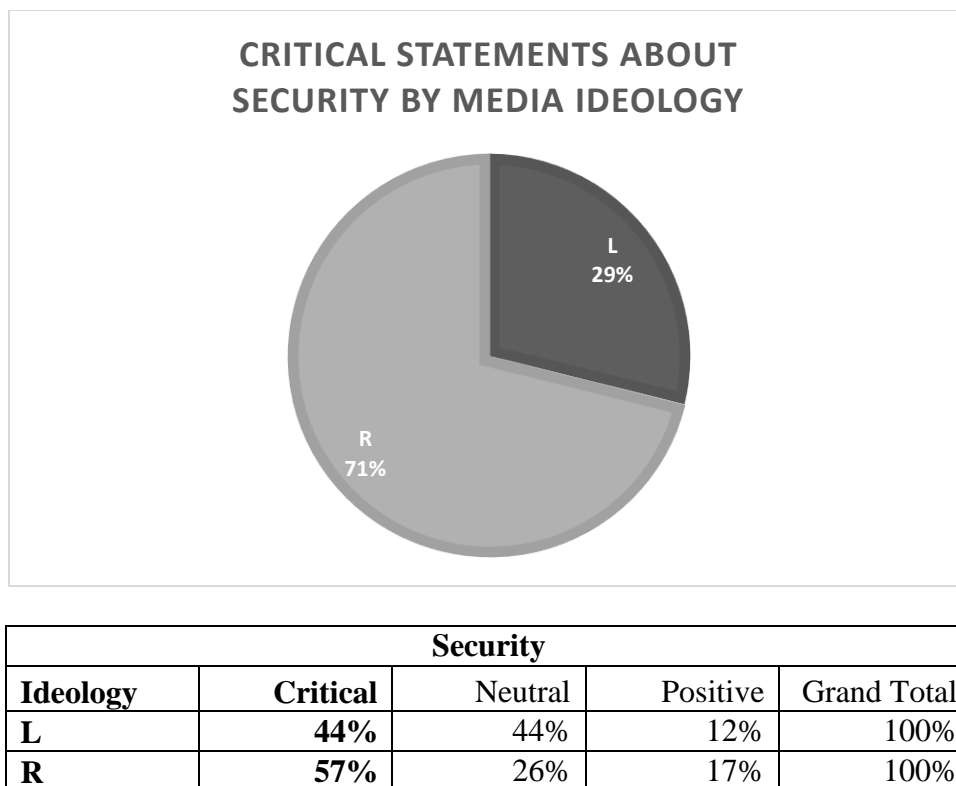
- Enrollment: This criteria value also included statements made about overall enrollment. This fell under Website Performance because enrollment was not the success of any one stage within the Layne & Lee model; rather, all steps were necessary for successful rollouts. The same

goes for unsuccessful enrollments as they could not be attributed to any single stage either. Furthermore, enrollment numbers themselves were controversial too. HHS repeatedly refused to disclose any enrollment figures until mid-November, a move which Republicans vehemently criticized. When the agency did release the numbers, they were initially very low, sometimes under 100 for certain states dependent upon the federal exchange, causing even further Republican rebuke. The left was more forgiving of the enrollment numbers as it tried to highlight some of the successful enrollments made within the federal exchange.

5.1.4 Security

Security was also a criteria value that right-leaning sources were more critical of then left-leaning sources. The right also spent more of its time being critical than the left did (See **Figure 6**).

Figure 6:



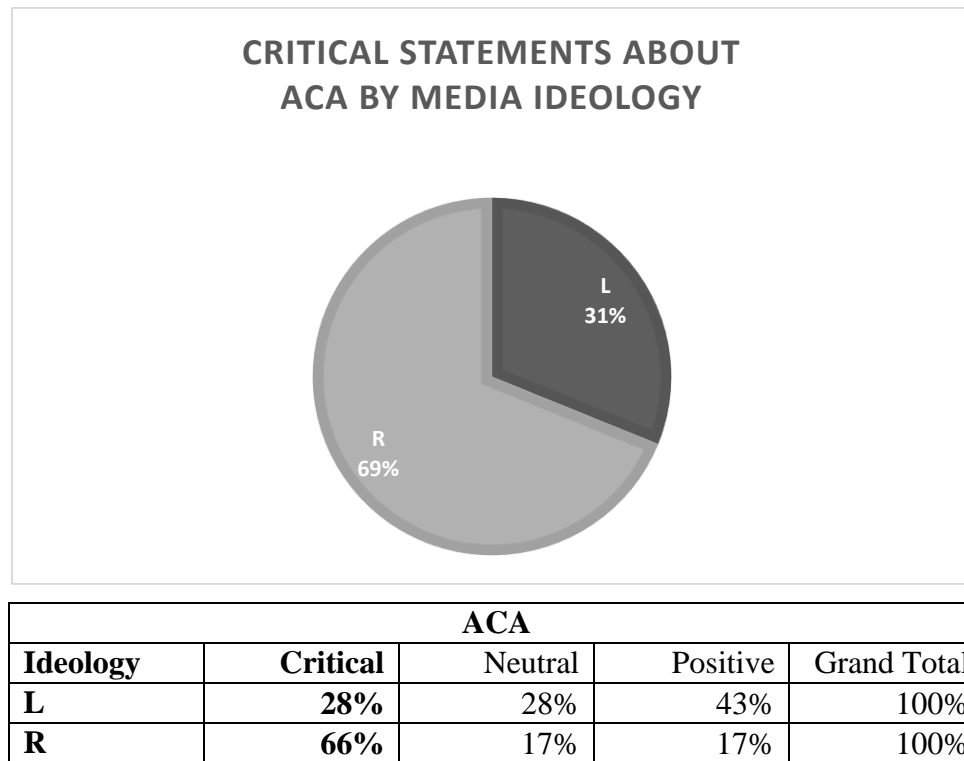
The discourse surrounding security focused on two points, flaws versus improvements and political warnings issued earlier about security.

- Security flaws and improvements: Republicans frequently claimed that the website posed significant security risks for users. The media did not report any security breaches but it did cite certain security and privacy issues raised by experts. Right-leaning sources claimed that these issues were strong enough to require a complete shutdown of the website. Left-leaning sources countered that these claims were inflated by Republicans who wanted to scare away users.
- Political warnings regarding security: The right claimed that it had addressed this issue at length in Congressional hearings but its warnings went unheeded by the administration.

5.1.5 ACA

The ACA was the fifth most critical criteria value. It is also the only criteria value that appeared in the top five most positive criteria values. As a result, it had a low percentage of neutral statements overall, making it a highly divisive issue. I will address this finding in the conclusion section. Below is a breakdown of the critical values by media ideology. The right contributed more critical statements to the ACA public discourse and it spent more of its time doing so (See **Figure 7**).

Figure 7:



When discussing the website, Republicans often pointed toward website failures to show that the healthcare law was flawed itself. The website became a conduit for criticizing the law, an activity they carried out frequently. Gerri Willis of Fox News provided an example:

“WILLIS: You know, it occurs to me, Congressman, that signing up should have been the easy part...After this, we have the really tough stuff coming and that's getting people coverage, getting people in the system and making sure that they pay what they're supposed to pay. If we can't get this first easy step done, how in the heck are we going to do the hard stuff?” ("Obamacare Exchange Backlog; More Fallout of the Government Shutdown; Stock Market Panel; Self-Driving Cars," 2013)

Conversely, Democrats came to defend the law, citing examples of improved policies, lower prices, or expanded coverage. However, such statements were coded positively. Democrats spoke in a *critical* tone regarding ACA when they criticized their Republican

counterparts for attacking the law instead of fixing the website. Melissa Harris-Perry made such a critique.

“But there`s an enormous difference between talking about the health care Web site and talking about the health care law. And so what`s happened at this point is that Republicans and conservative commentators have put those two things together. And said because there are technical glitches on a Web site, that is a failure of the policy. And that is simply politically dishonest” (“Politics Nation” 2013)

Another criticism that Democrats brought up concerned the 2003 rollout of Medicare Part D which faced similar glitches. Democrats cited their support of the Bush administration despite their opposition of the law, arguing that Republicans should do the same with Healthcare.gov.

5.2 Positive

The positive tone category was the least frequent of the three tone categories. The five criteria values that had the highest percentage of positive statements were State Exchanges, Repair Process, ACA, Catalogue, and Transaction. **Table 4** below shows the percentage breakdown for each tone, ordered from highest to lowest in the positive category.

Table 4: Most positive criteria values

Rank	Criteria value	Positive	Neutral	Critical	Grand Total
1	State Exchanges	44%	35%	20%	100%
2	Repair Process	36%	25%	39%	100%
3	ACA	30%	23%	47%	100%
4	Catalogue	20%	48%	33%	100%
5	Transaction	18%*	49%	33%	100%
6	Website Performance	18%**	26%	56%	100%
7	Security	15%	32%	53%	100%
8	Vertical Integration	14%	54%	32%	100%
9	Politics	7%	23%	70%	100%
10	Preparation	6%	32%	62%	100%
11	Horizontal Integration	5%	60%	35%	100%

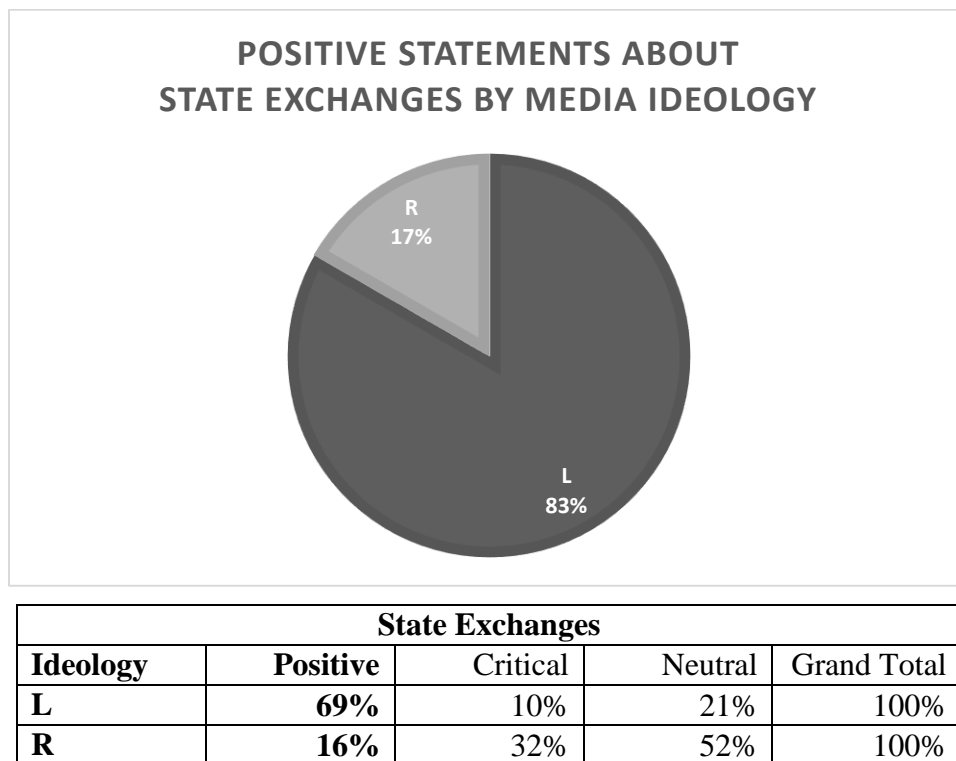
*Transaction was 17.95%

**Website Performance was 17.67%

5.2.1 State Exchanges

State Exchanges was the most positive criteria value. It was also the only criteria value in this investigation where there were more positive statements than neutral or negative ones. All other criteria values had a plurality of neutral or critical statements. The left contributed more positive statements about State Exchanges than did the right. The left also spent a considerably longer time talking about the criteria value than the right did (See **Figure 8**).

Figure 8:



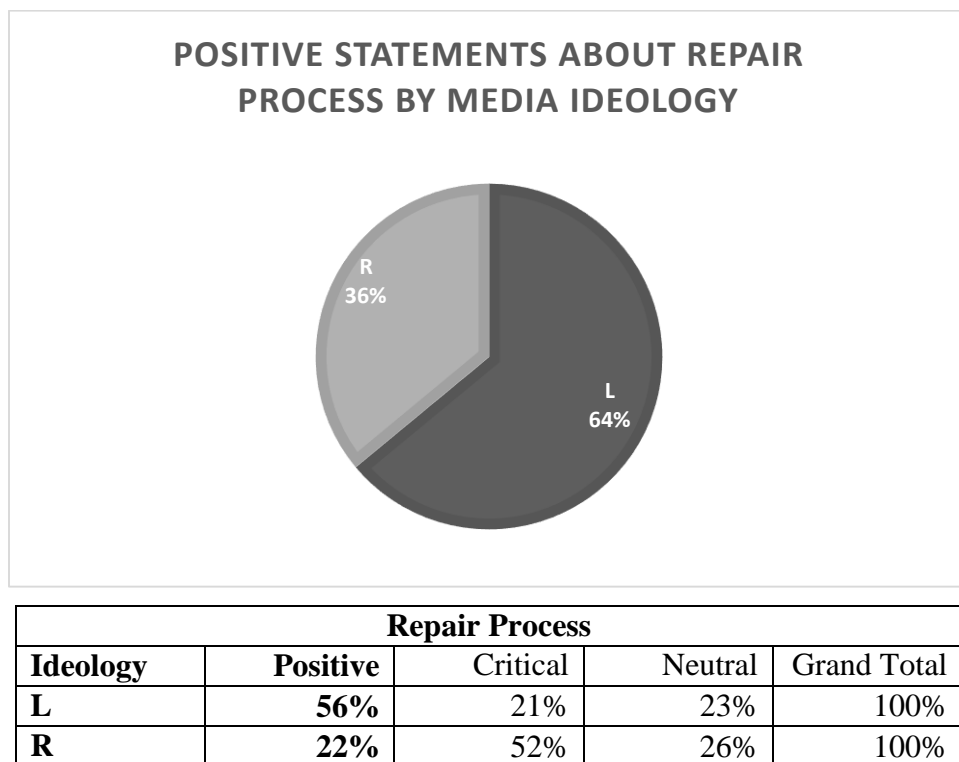
Left-leaning sources contributed primarily to the large number of positive statements about State Exchanges. This is possible due to the success that state exchanges had in enrolling state residents. State exchanges depended on the federal government for certain features, mainly vertical integration and horizontal integration. These state exchanges faced problems initially, but those problems were quickly fixed during the repair process. Because the states built the

other parts of the system that interacted with state insurance companies (which is where enrollments occurred and where the federal exchange had issues), enrollments were processed more quickly and more accurately, resulting in more positive statements. It also allowed for Democrats to defend the law and attack Republican governors who refused to build their own exchanges.

5.2.2 Repair Process

The second most positive category was the repair process. Left-leaning sources contributed a majority of the positive statements about the repair process, and they spent more time being positive about it than the right did (See **Figure 9**).

Figure 9:



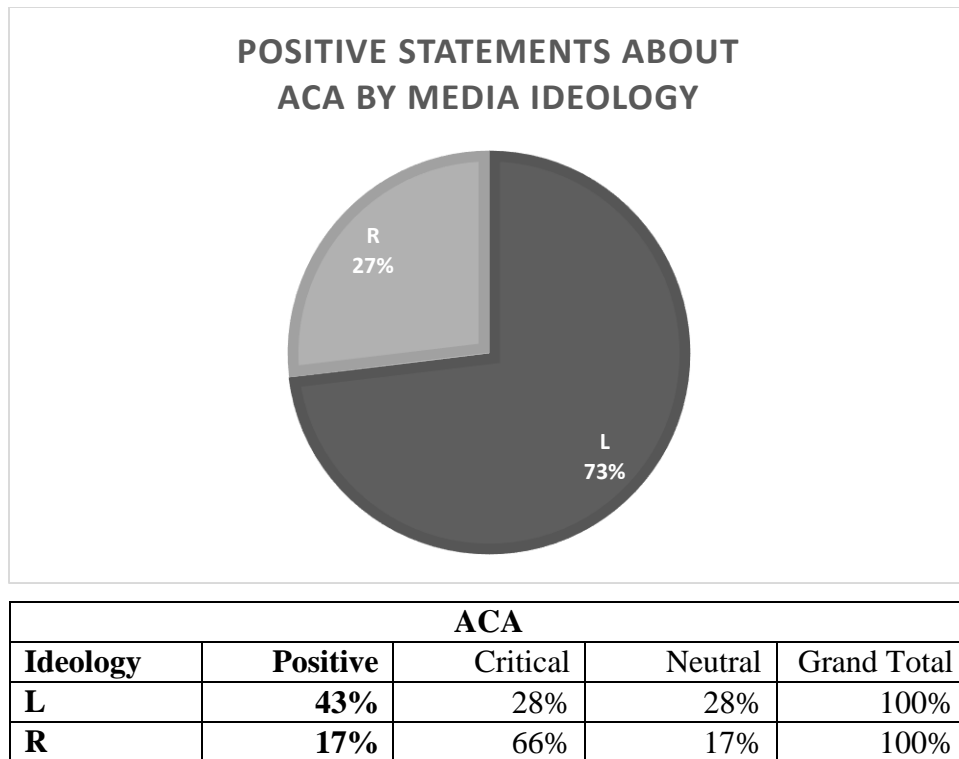
Although this criteria value was the second most positive criteria value, it had a higher percentage of negative statements (39 percent) than positive ones (36 percent).

- Improvements: Left-leaning media sources highlighted improvements in speed, function, and reliability of the website. Meanwhile, Republicans argued that the administration was significantly behind schedule to meet its self-imposed November 30th deadline.
- Obstacles: Initially, the main concern for the administration was the inability for people to move past the application point. As time passed, however, media sources began reporting the various “back-end” systems that needed to be built. Both sides were critical of this reality.
- Management changes: Management became a focal point of the media again as the administration brought in Jeffery Zients and Todd Park to fix the website. Zients was the former active director of the Office of Management and Budget under President Obama. He was going to take over the role of Director of the National Economic Council but this was delayed by Healthcare.gov. The President asked Zients to take over the repair efforts from HHS and CMS. Park was the Chief Technology Officer at the time of the rollout. His team created the initial website from 2010. The President also asked Park to co-lead the recovery efforts with Zients. They led what came to be known as the “tech surge” to fix the website. The two began their repair efforts in the middle of October. Left-leaning sources cited both individuals’ expertise, while right-leaning sources continued to criticize President Obama’s leadership on the issue.
- Overall progress: Both sides highlighted improvements and obstacles but right-leaning sources argued that the former outweighed the latter while left-leaning sources did the opposite.

5.2.3 ACA

ACA had the third highest percentage of positive statements (30 percent). Like the repair process, it too had a higher percentage of critical statements (47 percent) (See **Figure 10**). As mentioned earlier, it was also in the top five for most percentage of critical statements. I will discuss this in the conclusion. When the left mentioned the ACA in the context of the website, it was mainly positive although it did strike a critical tone when describing the actions of Republicans.

Figure 10:



The left came to the defense of the law, citing examples of improved policies, lower prices, or expanded coverage. They minimized website problems and referred to it as a speed-bump on the way to universal coverage. The law was “more than just a website.” Congressman Steny Hoyer (D-MD) expressed such a sentiment.

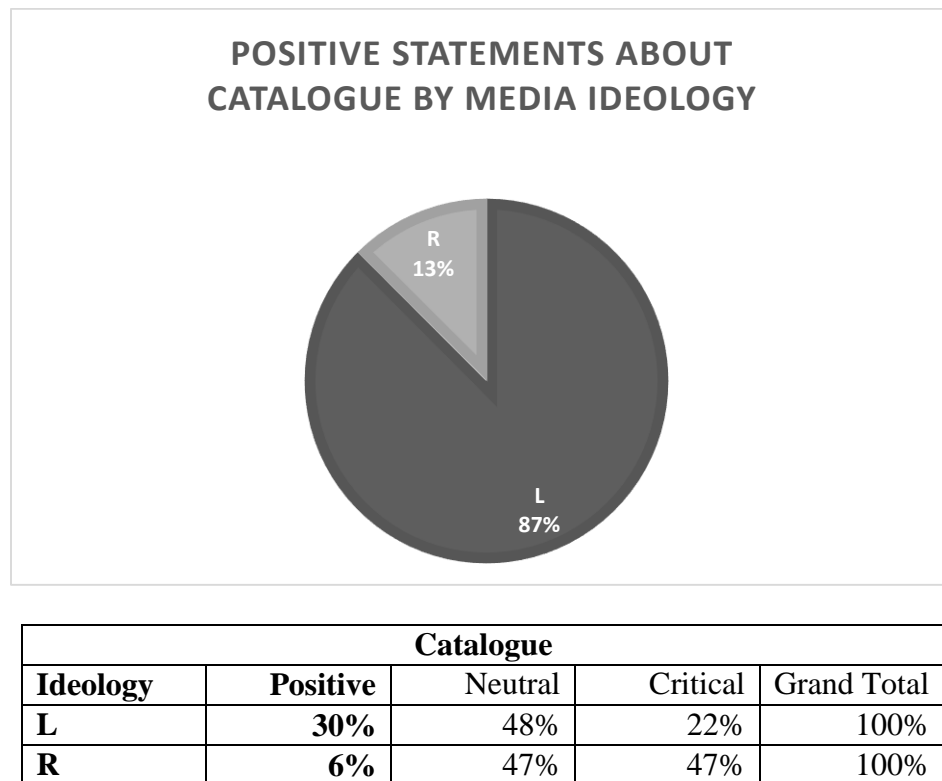
HOYER: Clearly, we believe this health care bill, the Affordable Care Act is going to be good for the American people. We`re disappointed with the rollout. We`re disappointed that the computer system, the website doesn`t work now, but the substance of this bill is going to provide millions and millions and millions of American with access to Affordable Care. (“THE ED SHOW” 2013)

Right-leaning media sources did have some positive statements about the ACA, but they were primarily quotes from prominent Democrats which were not followed up with specific analysis by the media source.

5.2.4 Catalogue

Catalogue is the first stage of the Layne and Lee model and was the fourth most positive criteria value. The left contributed significantly more positive statements about this criteria value than did the right. The left also has a higher makeup of positive statements when discussing the Catalogue stage (See **Figure 11**). Catalogue will be discussed in the neutral section as it is also the fourth most neutral criteria value.

Figure 11:

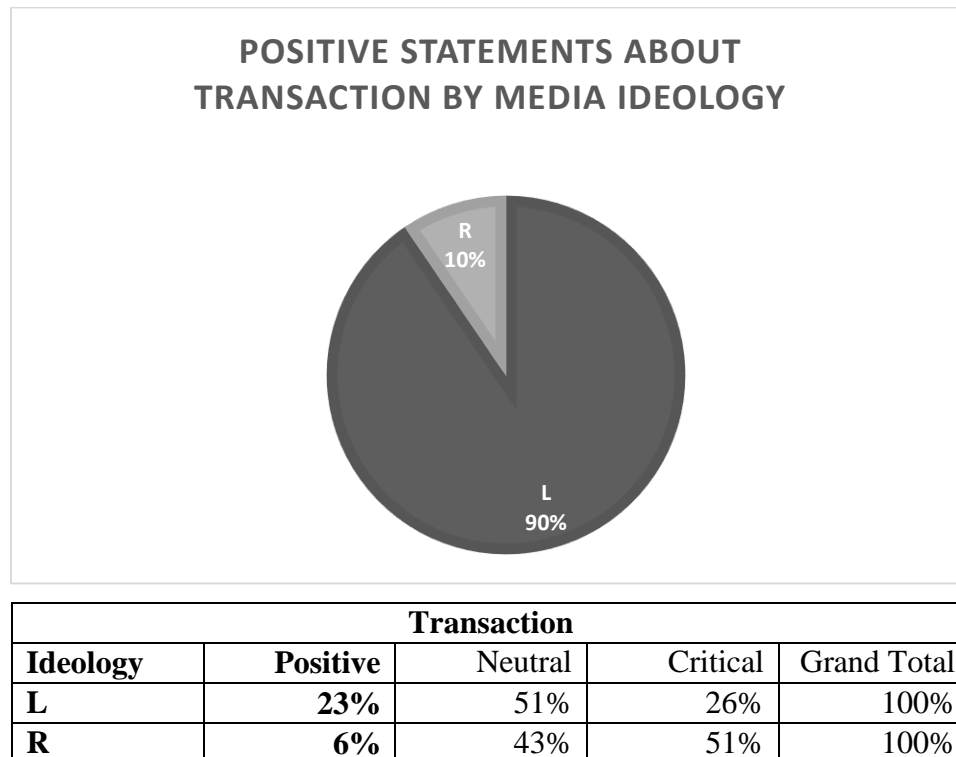


Like their neutral counterparts, positive statements about the catalogue stage also refer to the availability and presentation of information. I made a slight adjustment to the catalogue concept: rather than focusing solely on the presentation of information before the login process, I expanded it to include the presentation of information at other stages as well. For example, if someone commented on the user-interface of the website during the login process, I labeled that as a statement discussing cataloguing.

5.2.5 Transaction

Transaction is the fifth most positive stage. The left contributed a significantly larger number of positive statements than did the right. The relative percentage of positive statements within each ideology was also greater for the left than it was for the right (See **Figure 12**).

Figure 12:



The login process was a sticking point for the administration early on in the rollout process. The inability to login was very pervasive. With time, however, the administration fixed the login issue and the left began highlighting improvements.

5.3 Neutral

The five criteria values that had the highest percentage of neutral statements amongst all statements in that criteria value were Horizontal Integration, Vertical Integration, Transaction, Catalogue, and State Exchanges in that order (see Figure 3). The table below shows the percentage breakdown for each tone, ordered from highest to lowest in the neutral category.

Interestingly, the top four categories were all derived from the Layne & Lee model. Each criteria value within the Layne & Lee model had a higher number of neutral statements than critical or positive statements.

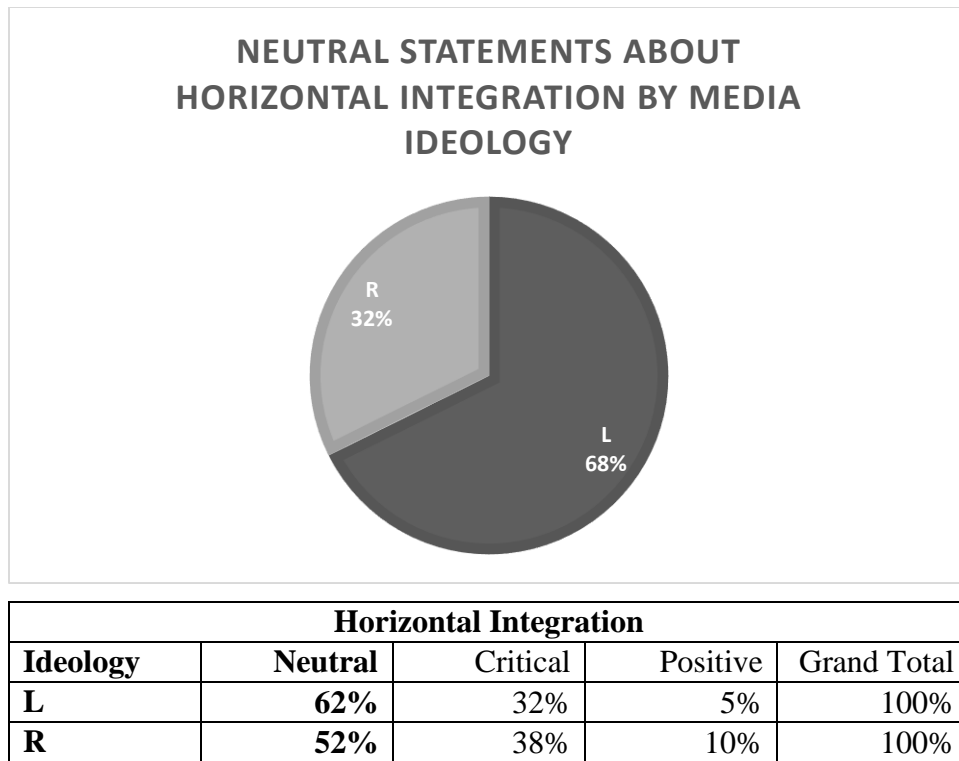
Table 5: Most neutral criteria values

Rank	Criteria value	Neutral	Critical	Positive	Grand Total
1	Horizontal Integration	60%	35.00%	5%	100%
2	Vertical Integration	54%	32%	14%	100%
3	Transaction	49%	33%	18%	100%
4	Catalogue	48%	33%	20%	100%
5	State Exchanges	35%	20%	44%	100%
6	Security	32%	53%	15%	100%
7	Preparation	32%	62%	6%	100%
8	Website Performance	26%	56%	18%	100%
9	Repair Process	25%	39%	36%	100%
10	Politics	23%	70%	7%	100%
11	ACA	23%	47%	30%	100%

5.3.1 Horizontal Integration

Horizontal Integration is the final stage of the Layne and Lee model. It was also the criteria value with the highest percentage of neutral statements. The left contributed more neutral statements about horizontal integration than did the right, but the percentage of neutral statements within each ideology is comparable (See **Figure 13**).

Figure 13:



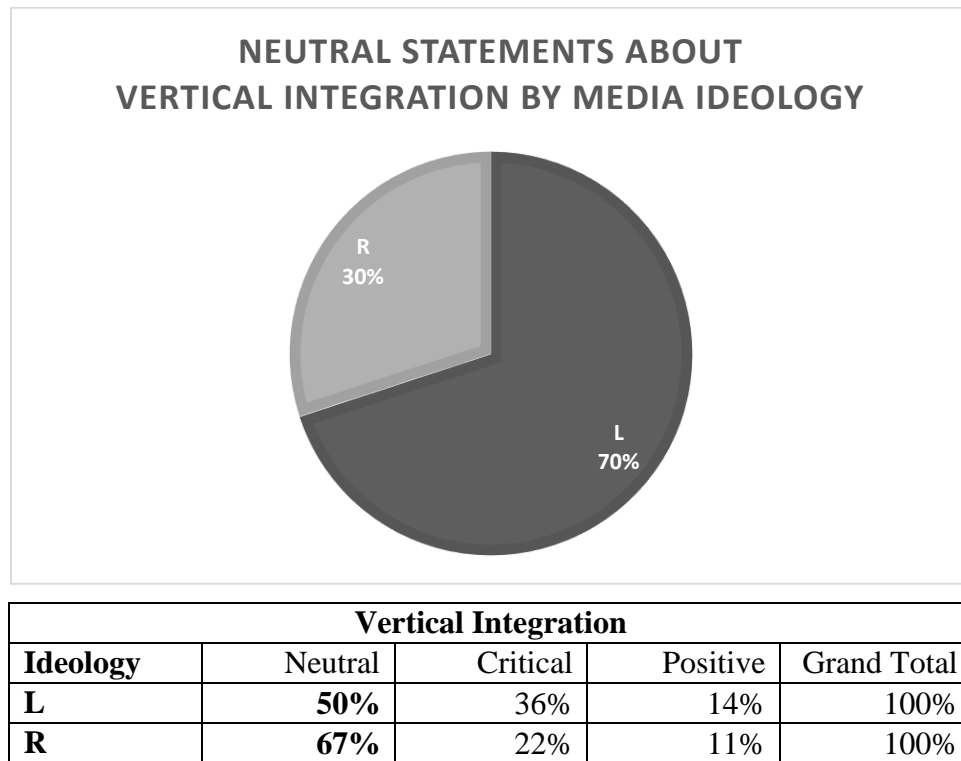
Horizontal integration and vertical integration made up what the media referred to as the “back-end” of the website. Horizontal integration was specifically responsible for connecting the federal exchange to other federal systems for identity verification and to insurance systems for enrollment. Initially, this stage of the website was not a large issue as most people were stuck on the Transaction stage. However, after the Obama administration began fixing login issues and adding more server capacity, the media picked up on the exchange between federal databases and health insurance databases. As insurance companies began reporting that they had received incorrect or incomplete data from enrollees, the administration admitted that it had yet to build the vital backend infrastructure needed to perform enrollment. The left and the right picked up on this but criticized the symptoms (website performance) rather than the cause itself.

5.3.2 Vertical Integration

Vertical Integration is the second to last stage of the Layne and Lee model. It also has the second highest percentage of neutral statements. The left contributed more neutral statements

than did the right, however the right had a higher percentage of its public discourse about vertical integration categorized as neutral than the left (See **Figure 14**).

Figure 14:



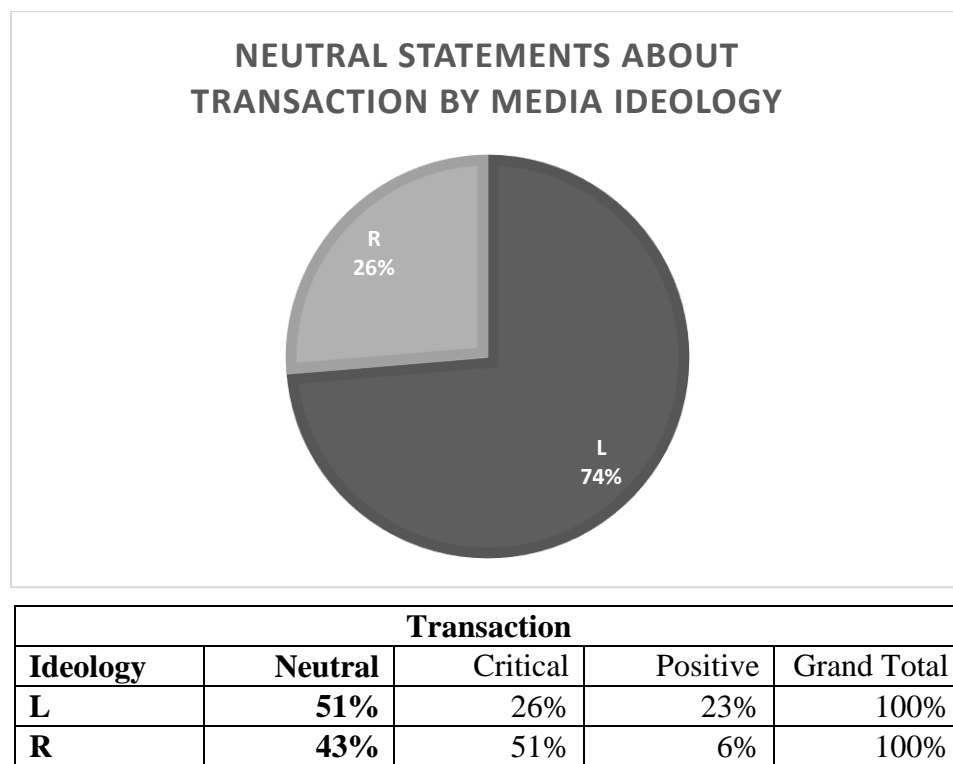
Vertical integration is similar to horizontal integration in that it makes up the “back-end” of the website. This stage is crucial for identity verification for state exchanges. At the state level, users entered personal data which was then crosschecked with other federal databases. Quality Software Services International (QSSI) was responsible for creating this tool known as the Enterprise Identity Management (EIDM). The EIDM tool was not functioning correctly after the rollout, but QSSI fixed it within the first few weeks, allowing states to successfully enroll applicants. As was the case with horizontal integration, the left and right both picked up on this deficiency but chose to highlight issues with overall website performance instead.

There were 18 statements that discussed both horizontal and vertical integration. Because of the low number of total statements in each criteria value, I added each statement to each category, creating 18 duplicates.

5.3.3 Transaction

Transaction is the second stage in the Layne and Lee model. It had the third highest percentage of neutral statements. Of the Layne and Lee criteria values, it also had the highest number of total statements. The left contributed more neutral statements about Transaction than did the right. Although neutral statements made up similar percentages of each ideology's discourse about the transaction stage, the right actually had a higher percentage of critical statements (51 percent) than it does neutral ones (42 percent) (See **Figure 15**).

Figure 15:



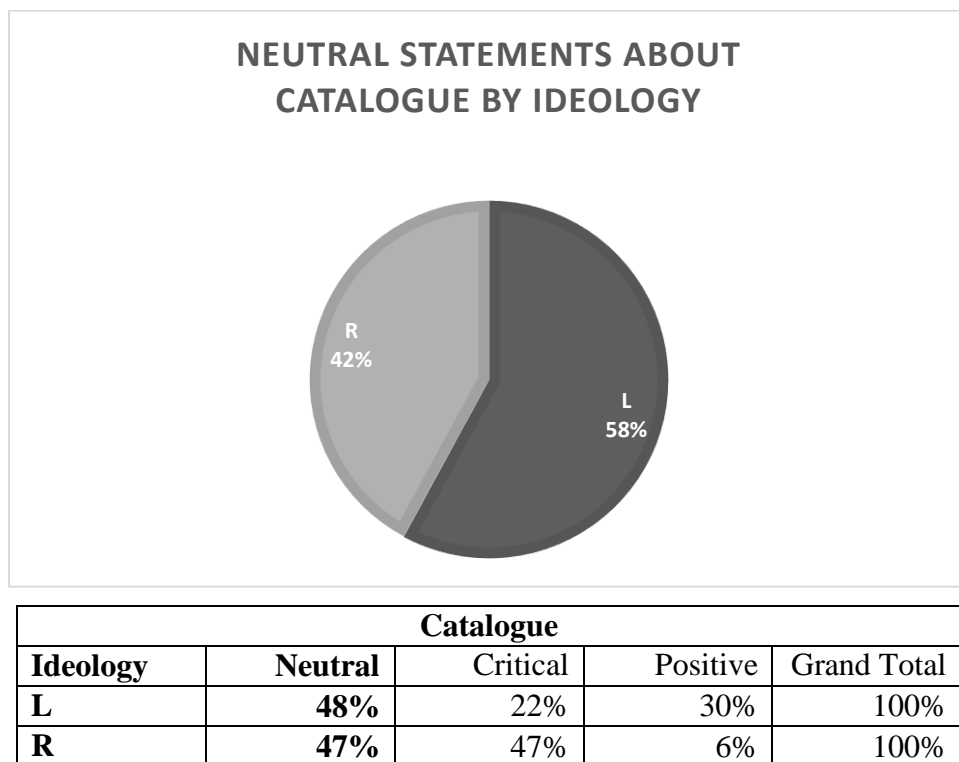
In the first few weeks after the rollout, transaction was an important talking point because the most noticeable website failure was an inability to login. Applicants were getting stuck at various stages of the account creation tool, which added even more confusion and anger. The administration blamed it on a lack of server capacity and excess traffic, which was true to a certain extent, but buggy software within the account registration tool made it much worse. The administration tried a variety of fixes to alleviate the problems. One such fix was to encourage

applicants to apply by mail or by phone. These services still depended upon the website, but they did not rely on the account creation tool as individual applicants did. Another solution the administration attempted was creating a virtual waiting room to deal with heavy traffic during account registration. This also frustrated applicants. When the administration ultimately fixed these issues, problems with incomplete software arose in the backend.

5.3.4 Catalogue

The fourth most neutral criteria value was the Catalogue stage of the Layne & Lee model. The left contributed more neutral statements than did the right, but each ideology had a similar percentage of neutral statements (See **Figure 16**).

Figure 16:



This stage primarily focused on the presentation of information and the appearance of the website itself. The public discourse surrounding the Catalogue stage also included a discussion

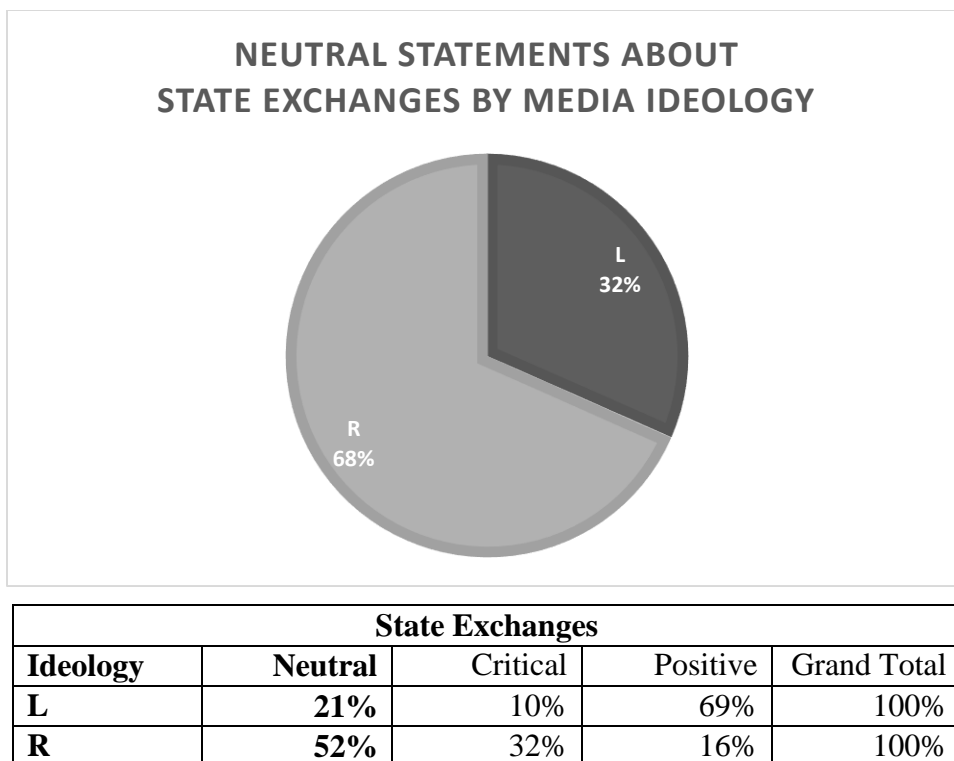
regarding a Spanish version of the website. The administration delayed this piece initially because it felt unprepared to execute it successfully.

Neutral statements about the Catalogue criteria value discussed observations about the site's layout and appearance, noting the availability of phone numbers and webpages for further information as well as the presentation of information at different stages of the website. The statements also discussed the Spanish version of Healthcare.gov.

5.3.5 Stage Exchanges

State Exchanges was the fifth most neutral category. Of the top five neutral categories, it was the only one where the right contributed more neutral statements than did the left. Within each ideology, the right also had a higher makeup of neutral statements about State Exchanges (See **Figure 17**).

Figure 17:



Because State Exchanges was also the criteria value with the highest percentage of positive statements, it is possible that the right tried to temper its discussion of the subject while the left tried to promote it as much as it could.

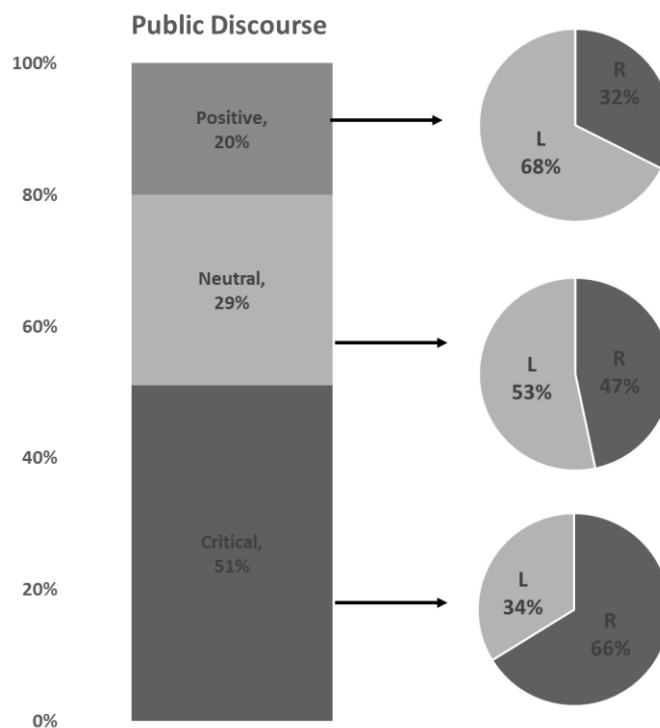
6 CONCLUSION

6.1 Hypothesis 1 was partially true: Media ideology had an impact

Hypothesis 1 stated that ideology would influence the tone of the public discourse: the left would be more positive and neutral when discussing the rollout while the right would be more critical.

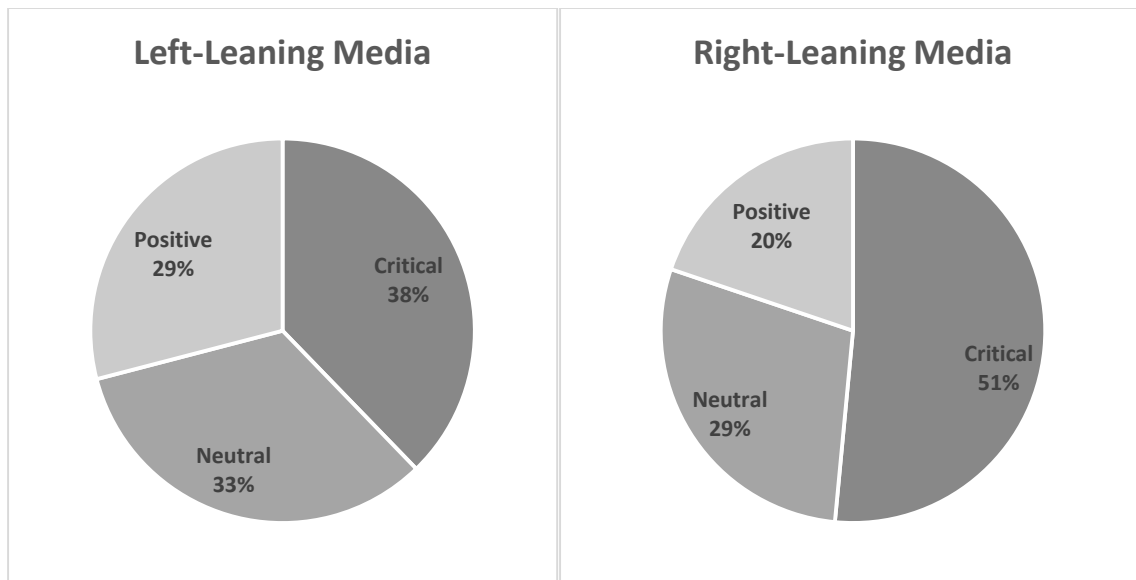
The research partially proves hypothesis 1 true. It showed that ideology did play an important role in determining the tone of the public discourse. The right was responsible for 66 percent of the critical discourse while the left was responsible for 68 percent of the positive discourse (See **Figure 18**).

Figure 18: Public discourse by tone and media ideology



Within each ideology, however, there was more nuance. While the right was more critical than it was positive or neutral, which supports the hypothesis, the left was also more critical than it was positive or neutral. The key difference was that the percentage breakdown of tone was more even for the left than it was for the right (See **Figure 19** below). This means that the left was more positive than was the right because the right contributed such few positive statements that the left naturally constituted a larger percentage of the positive public discourse. Another way of saying this is that the left was more balanced in its coverage of the rollout than was the right, which was overwhelmingly critical.

Figure 19: Left- and Right-leaning media by tone



What complicates hypothesis 1 (and partially prevents one from saying that the left was less ideological) is its assertion that the left would be *more* neutral than the right would be. The left contributed 53 percent of the neutral discourse while the right contributed 47 percent, two relatively similar percentages. Further complicating this is the relative breakdown within each media ideology. For the left, neutral discourse constituted 33 percent of its total discourse while it constituted 29 percent of the right's total discourse, also similar percentages. As a result, asserting that the left was more balanced becomes difficult. Is a balanced media one that contributes equal percentages of positive, neutral, and negative statements or is it one that

contributes primarily neutral statements? By the former definition, the left was more balanced; by the latter, neither was balanced.

From this research, we can say that media ideology did have an impact, but its impact was not exactly in the way hypothesis 1 suggested. A more accurate statement based on the research would be the following: media ideology had an impact in so far as the left contributed more to the positive discourse while the right contributed more to the negative discourse. Both were equally neutral.

6.2 Hypothesis 2 was true: subject matter did influence tone

Subject matter (or criteria value in this investigation) played an important role in determining the tone of the discussion. Certain subjects were more polemic than others while some offered a chance for polite disagreement. There was little overlap between the five most critical criteria values and the five most positive criteria values, demonstrating that most issues brought out either criticism or positivity (See **Figure 20, 21, and 22**).

Figure 20:

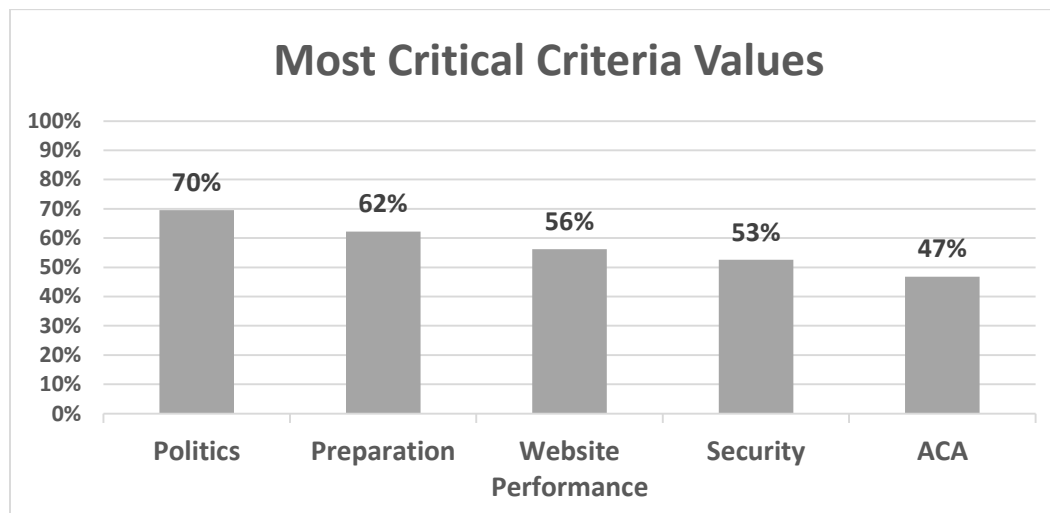


Figure 21:

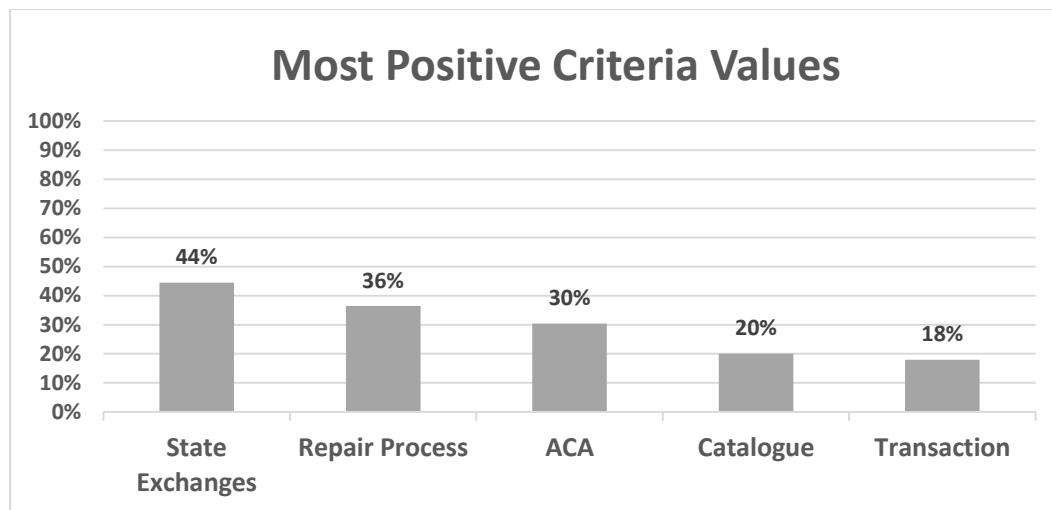
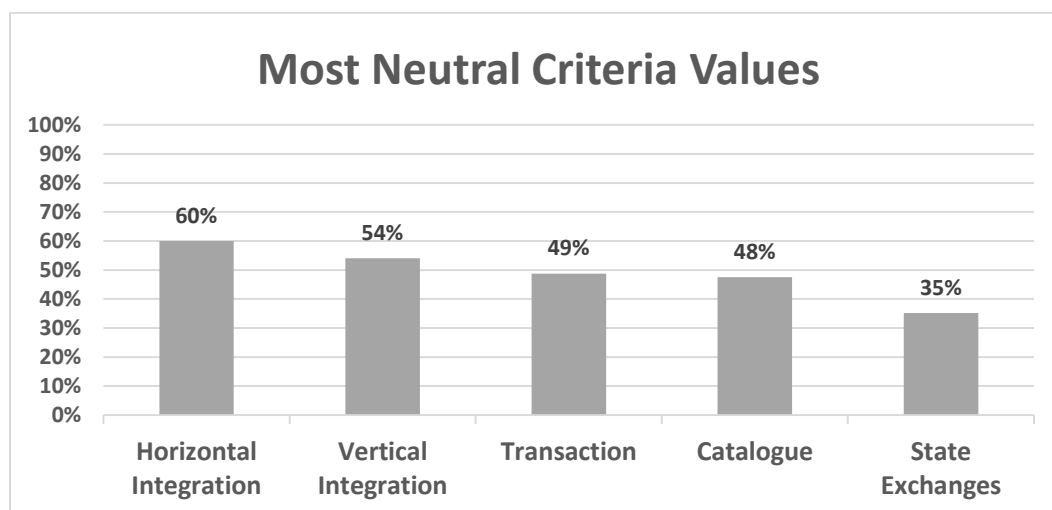


Figure 22:



The one criteria value that appeared on the list of top five most positive criteria values and critical criteria values was the ACA. This subject elicited either praise or criticism. Accordingly, it had the lowest percentage of neutral statements (22.76 percent). The right often used the public sphere to criticize the healthcare law while the left used it to either defend the law (positive) or counter-criticize (critical) Republicans for attacking the law. The lack of neutrality in the media coverage is somewhat emblematic of the American public itself: most Americans either support the law or oppose it ("Health Tracking Poll: Exploring the Public's

Views on the Affordable Care Act (ACA)," 2014). Also noteworthy is how often the media discussed the ACA: with 391 statements, the subject was the most discussed issue behind Politics. Given its popularity and lack of neutrality, it is possible that the website served as a proxy for many pundits to criticize the law itself.

There are some criteria values that had a high level of neutral statements and either a high level of positive or critical statements. Although these statements overlapped across two tone categories like the ACA did, the neutral factor did not add anything insightful. For example, knowing that Transaction was neutral and positive does not entail a worthy of investigation.

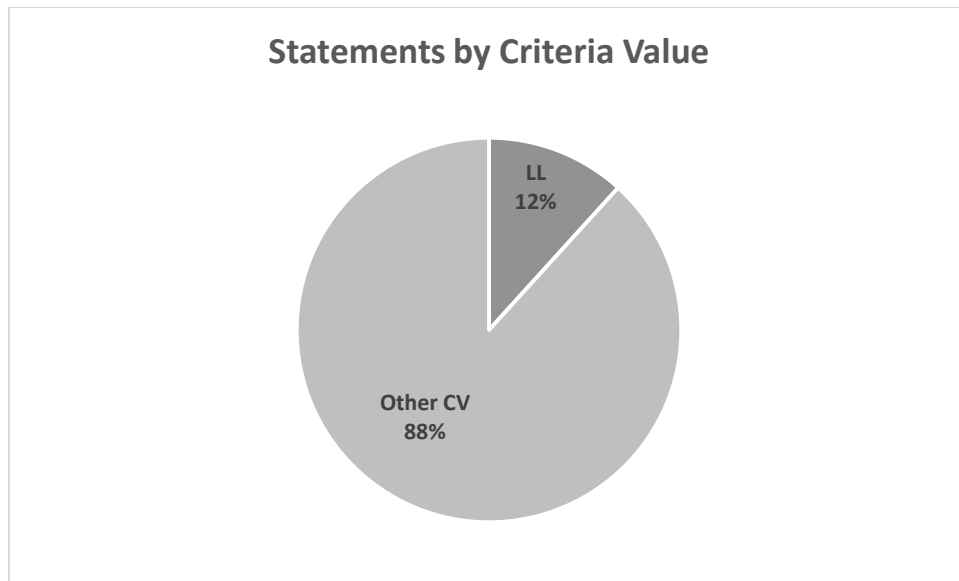
6.3 Layne & Lee model

This paper used the Layne & Lee model to organize and analyze the public discourse surrounding Healthcare.gov. The model was useful insofar as it provided a technical basis for understanding how an e-government website might function. Its four stages (Catalogue, Transaction, Vertical Integration, and Horizontal Integration) were accurate in describing certain aspects of the website. However, the model had two shortcomings that made it ineffectual for answering the research question at hand. First, its highly technical focus excluded much of the discourse, and second, the model was too rigid for modern e-government.

6.3.1 Technical focus

The Layne and Lee model was a highly technical interpretation of e-government. This was useful for understanding the underlying issues with the website, but it was insufficient for understanding the public discourse as a whole. While the media did discuss technical aspects of the website, it also discussed a breadth of other important issues the model did not encapsulate. This was evident after my initial research when I quickly realized that a majority of statements issued about the website did not focus on technical details at all. In fact, the four Layne and Lee criteria values in total only made up 12 percent of all statements issued about the website (See **Figure 23**). The model was too narrow to encapsulate the wide subject matter that the public or media discussed.

Figure 23:



Moreover, when the model did encapsulate public discourse, it mainly highlighted neutral statements. The top four criteria values with the highest relative percentage of neutral statements were all in the Layne and Lee model. Neutral statements are not bad in their own right. However, the model was not accurate *per se* because discourse was not mainly neutral. Often, the public was focused more on other more salient, controversial issues like the ACA, the repair process, or political events.

6.3.2 The Linear Model

The second issue with the model was its rigidity. The Layne & Lee model assumes that e-government will advance linearly. Healthcare.gov, however, did not proceed in such a clean and clear-cut manner. Although it was true that the backend was primarily constituted of vertical and horizontal integration, all four stages overlapped in some manner. For example, transaction clearly played a role during account creation, but it also played a role in comparing, choosing, and paying for a plan, steps that came after horizontal and vertical integration. A complex system like Healthcare.gov has multiple, overlapping parts that make it difficult to identify one single step as a single stage within a model.

6.3.3 Other considerations

With the Layne & Lee model, it is important to note that Healthcare.gov was a very unique case, possibly one too unique for any model to be entirely accurate. The website was too closely tied to political issues to be solely about technology. It is possible that other technology rollouts like the website for Medicare's Prescription Drug Benefit program would more closely follow Layne and Lee's model. This is unlikely, however. There may be some websites at the federal level which are not tied to new government initiatives. The ones that are, though, carry political associations that cannot be dismissed. Also of importance is the model itself. Not only is it too technical, but the researchers created it in 2001. In that time gap, we have seen technology progress considerably.

Layne & Lee was still useful for understanding the underlying technology involved. I originally chose it because it was cited often within the e-government sphere. My investigation indicates a need for a better, more inclusive model of government use of technology.

6.4 Areas of further research

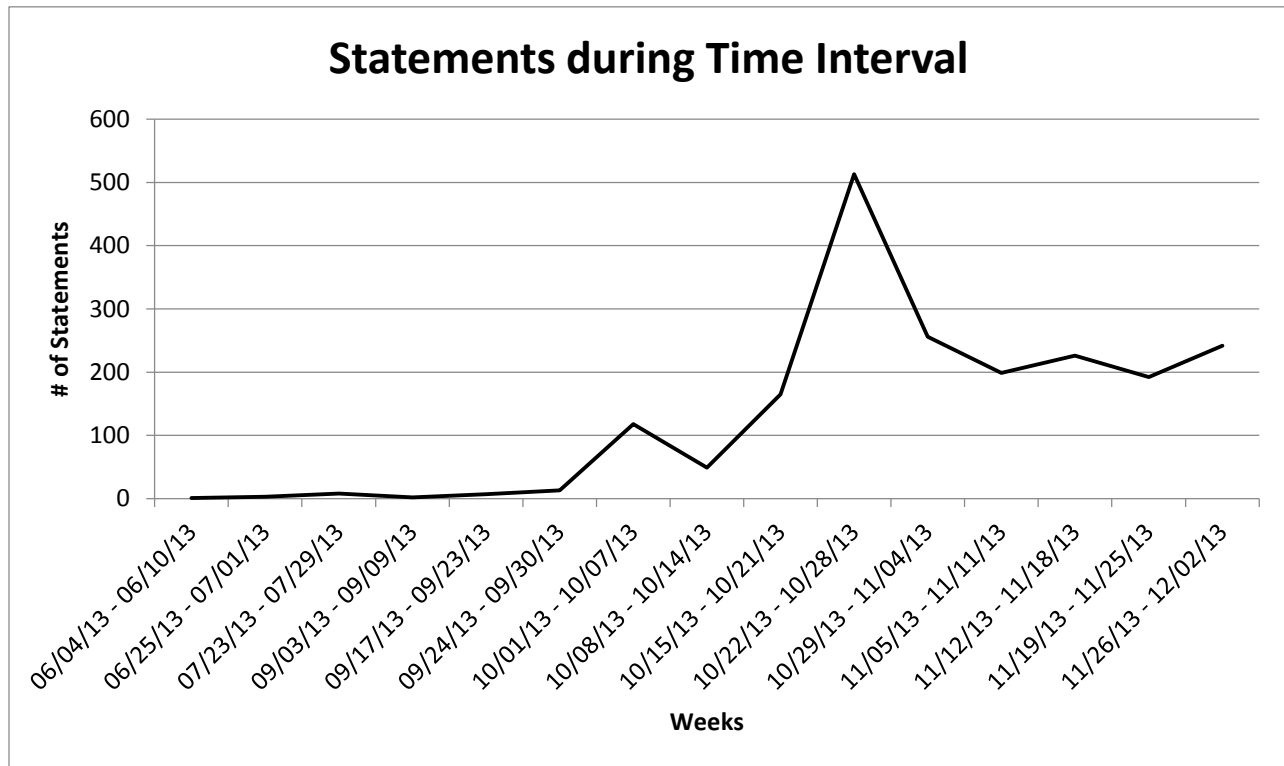
Given the time and space constraints of this investigation, there are a few areas that were not discussed or investigated that deserve further attention.

6.4.1 Influence of external events

While the rollout of Healthcare.gov was an important event in its own right, the event was not separate from the political context in which it occurred. As noted by the research, a large part of the public discourse (22 percent) was political in nature. Public discourse surrounding the rollout of the website was closely tied to politically salient events like the government shutdown – which started the same day as the rollout – the subpoena of key government officials like Katherine Sebelius, and Congressional elections a year down the line. Although this investigation did capture the prevalence of political discussion within the public discourse, it did not investigate these external events further or quantify the exact impact of such events. This choice is especially significant in the month of October when there was a large amount of discourse. When looking at the number of statements over the six month period, one can clearly see an uptick in media coverage in the week of September 24, 2013, and October 8, 2013, and a

peak in media coverage in the week of October 22, 2013 (See **Figure 24**). What factors explain this pattern? How do these events affect both the content and tone of the public discourse? Further research is needed to answer these questions.

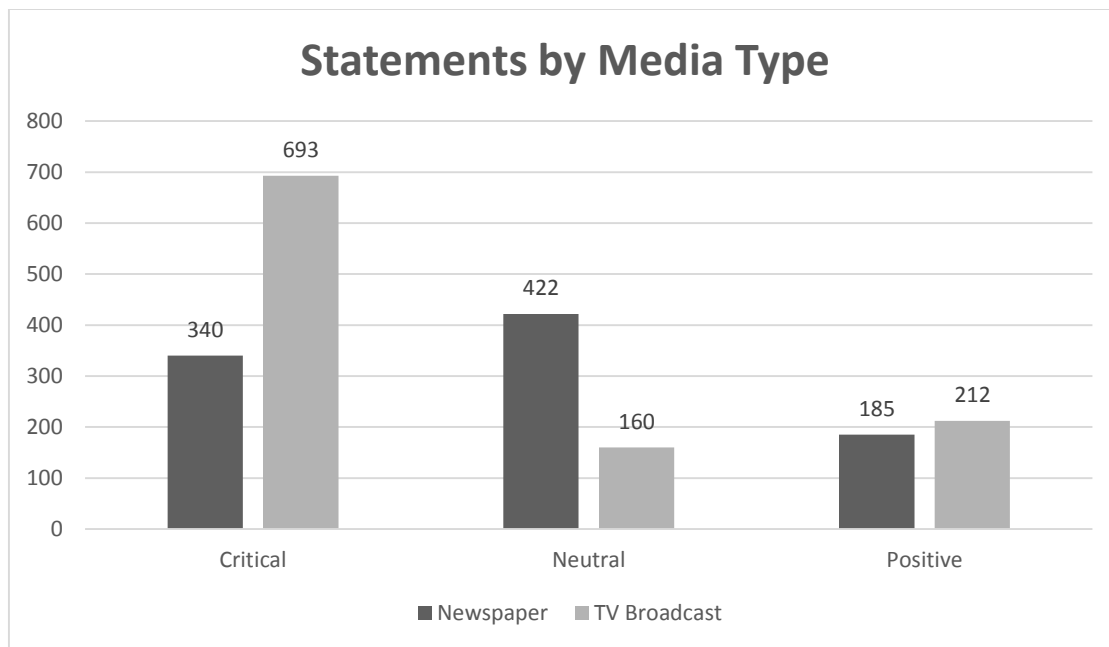
Figure 24:



6.4.2 Media type

Although this investigation identified both media ideology and media type when coding statements, it primarily focused on the former when analyzing tone. In reality, media type, too, played an important role that merits further investigation. When looking at the breakdown between online newspapers and television broadcasts, one can see a clear difference in the critical and neutral discussion of each medium. Broadcasts were clearly more critical than were newspapers while newspapers were more neutral (See **Figure 25**). Each medium contributed relatively similar amounts of positive statements. Further research is needed to explain the difference between the two mediums.

Figure 25:



6.4.3 Statistical analysis needed

This investigation asked a broad question to begin with: What factors best explain the tone of the media coverage surrounding the rollout of Healthcare.gov in the fall of 2013? Because the topic was relatively new (only four months removed at the beginning of the investigation), no structured data was available for analysis. This required an intensive coding of all articles, which left little time for rigorous statistical analysis. Although many percentages and figures are seemingly extreme enough on paper to merit consideration, a closer, statistical approach might benefit the aims of the investigation.

6.4.4 Media does not encapsulate all types of public discourse

This investigation chose to operationalize public discourse as media coverage, a decision made based on the literature available. This was an effective decision insofar as it analyzed how politicians, media elites, and individuals interacted with each other in the public sphere. Nonetheless, media coverage alone did not capture all of the discourse available. In fact, media coverage only encapsulated information secondhand as it surfaced. Instead, the Obama

administration and Congress often served as firsthand sources of information. Although Habermas would argue that these entities exist in the state rather than the public sphere, their influence on the sphere is undeniable. In fact, it is possible that their actions as state actors more intimately affected the tone of the *public* discourse than did ideology or subject matter. This poses interesting questions for the study of news media, public discourse, and government-media relations. Further research could adopt a similar methodology to analyze reports issued by the administration or transcripts from Congressional Hearings in order to determine correlation. This could shed light on how the state affects public discourse, thereby providing a better understanding of both realms.

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7 APPENDIX

Appendix 1: Example Spreadsheet

Source	Source Type	Ideology	Date	Headline	Statement	Criteria Value	Tone
Washington Times	Media	R	09/17/13	How do the health law's online exchanges work?	<p>Then the exchange takes over. It first determines whether you are eligible for Medicaid; if so, it will refer you there. If not, it will tell you how much of a subsidy you can receive. (These subsidies will be sent directly by the government to the insurer to pay a portion of the premium.)</p> <p>After that, the exchange will show you a list of health plans and their premiums and out-of-pocket costs, including deductibles and co-payments. If you decide to buy one of those plans, in most cases, you will be directed to the insurer's Web site to make the payment. In some jurisdictions, consumers will make their first premium payment to the exchange and then further monthly payments to the insurer.</p>	Horizontal Integration	Neutral
Washington Times	Media	R	10/02/13	Buzz about Obamacare exposes bugs in the system	"If this doesn't show the hunger the American people have to sign up for health care, I don't know what does," Senate Majority Leader Harry Reid, Nevada Democrat, said at a pep rally to tout the opening of the exchanges, which are a centerpiece of the Affordable Care Act.	ACA	Positive
Washington Times	Media	R	10/02/13	Buzz about Obamacare exposes bugs in the system	"That gives you a sense of how important this is to millions of Americans around the country, and that's a good thing," Mr. Obama said.	ACA	Positive
New York Times	Media	L	10/07/13	Health Exchange Delays Tied to Software Crash in Early Rush	"It's poorly designed," said Luke Chung, the president of a database company in Virginia who has publicly criticized the site in recent days. "People higher up are given the excuse that there are too many users. That's a convenient excuse for the managers to pass up the chain."	politics	Critical

